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Development of Basic Socio-Economic Units in Two Eskimo Communities

By Asen Balikci

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Preface

The data included in this report were collected during two field expeditions in two Eskimo settlements in the Eastern Canadian Arctic: Povungnituk, on the east coast of Hudson Bay, during the summer of 1958, and Pelly Bay, on the Arctic coast, where I spent the winter of 1960. The present work was completed while I was on the staff of the National Museum of Canada. I acknowledge with appreciation the generous assistance received through this appointment.

Rev. Frans Van de Velde, O.M.I., missionary at Pelly Bay, helped me extensively in the collecting of data pertaining to the social organization of the Pelly Bay Eskimos. I am grateful to Dr. W. D. Strong, Dr. Conrad M. Arensberg, Dr. Morton H. Fried, Dr. R. Cohen, Dr. Jacob Fried, Mr. Victor Valentine, and Mr. William Taylor, for helpful criticism. Several of the ideas expressed here were discussed during a seminar on the aboriginal population of northern North America held at McGill University in the winter of 1960–61. The completion of this work has become possible through a grant from the Département d'Anthropologie, Université de Montréal.

Three scientists influenced me greatly in adopting the particular approach employed in this dissertation. From Professor W. D. Strong I learned that in the analysis of cultural material it is a worthwhile task to concentrate on certain elements considered as crucial for the understanding of cultural patterns viewed in a historical perspective. Professor Conrad Arensberg taught me the value of comparing organizational forms. During my field trips I carried Professor John J. Honigmann's book on the Kaska Indians as I considered it a model study of a northern community. After each field trip I have suffered the same sense of failure, being unable even to remotely approach the standards set in his work.

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Résumé

Cette étude poursuit deux buts. Le premier correspond à la découverte des facteurs écologiques et économiques qui président à la formation des groupes socio-économiques fondamentaux chez les Esquimaux Netchilik de la côte Arctique et chez les Esquimaux Povungnituk de l'est de la baie d'Hudson. Le second objectif essaye d'appliquer aux Esquimaux du Canada l'hypothèse formulée par Julian Steward et Robert Murphy (*«Tappers and Trappers: Parallel Process in Acculturation»*, dans *Economic Development and Cultural Change*, vol. IV, nº 4, 1956), concernant la restriction des groupes socio-économiques fondamentaux chez les Algonquins du nord-est du Canada.

La disposition des trois principaux chapitres de ce travail est fondée sur la nature de leur teneur. Étant donné que ces Esquimaux sont tributaires de la faune utile, chaque chapitre commence par une description de la répartition du gibier dans la région et au cours de la période en question. On trouve ensuite une énumération systématique des différents moyens de survie, comme la chasse au caribou et aux mammifères marins, la pêche, et autres. Ces techniques sont analysées sous la double rubrique «activités individuelles et collectives», conduisant à la formation des groupes. Le fond de chaque chapitre est consacré à une énumération des groupes socio-économiques fondamentaux, expression qui désigne l'extension, la composition et la fonction de groupements sociaux réels qui se sont formés pour la production, la distribution et la consommation de biens d'une importance capitale. L'auteur s'est efforcé d'établir les relations exactes qui existent entre certaines caractéristiques du gibier et des techniques, et les groupes de collaboration qui poursuivent un même but à un moment donné. Ces données sont incorporées dans la description des cycles annuels de migration, qu'on trouvera à la fin de chaque chapitre.

Les renseignements recueillis sur les Netchiliks au cours d'un voyage sur le terrain en 1960 révèlent que, traditionnellement, trois genres de groupes socio-économiques existaient:

1. l'*ilagiit* restreint, espèce de famille étendue ou alliée à d'autres, qui formait le principal groupement social pendant la migration estivale vers l'intérieur des terres. Elle était caractérisée par une intense coopération dans la chasse au caribou et la pêche au-dessus de barrages de pierre, de même que par le partage du gibier au petit bonheur et par la prise des repas en commun;
2. le camp d'hiver, qui réunissait plusieurs de ces familles étendues chassant ensemble les phoques aux trous de respiration. Ici, les partages du gibier suivaient des règles précises;

3. la famille nucléaire elle-même, qui mangeait isolée en hiver; pour l'acquisition de la nourriture, la famille agissait habituellement en tant que partie d'un groupement plus considérable.

L'introduction de la chasse à la carabine et de la pêche au filet a produit un morcellement marqué de la société Netchilik. Le camp d'hiver et l'*ilagiit* restreint ont cessé d'exister en tant que groupements économiques et, en 1960, la famille demeurait le seul groupement fonctionnel dans tous les domaines de l'économie. Cette évolution a eu lieu malgré le fait que le piégeage du renard demeurait une occupation secondaire dans cette région.

D'après l'analyse de Steward et Murphy, les Algonquins du Nord-Est vivaient traditionnellement en bandes nomades qui chassaient le gibier migrateur de grande taille. Après l'introduction du piégeage intensif des animaux à fourrure, considéré ici comme la cause des changements sociaux, il y a eu diminution de la chasse pour la nourriture, alors que les grandes bandes ont disparu pour faire place à de simples unités familiales agissant comme groupements socio-économiques fondamentaux en toute saison.

Les Puvirniturmiuts, mentionnés ici, ont servi de groupe de contrôle pour la comparaison des changements socio-économiques survenus chez les Esquimaux canadiens et chez les Algonquins du Nord-Est. Les Puvirniturmiuts sont d'actifs trappeurs d'animaux à fourrure et la chasse au phoque n'a chez eux qu'une importance secondaire. Dans tout ce qui a trait au commerce de la fourrure, la famille proprement dite tend à assumer le rôle de groupement fondamental. Cependant, en ce qui concerne les autres occupations, des formes sociales plus complexes se sont développées et ont amené la formation de groupements économiques plus considérables.

Chez ces Esquimaux canadiens, les trois éléments apparemment reliés que sont la chasse pour la nourriture, le piégeage des animaux à fourrure et les groupements fondamentaux tendent à se comporter comme des variables indépendantes si l'on étudie leur évolution dans plusieurs localités.

CHAPTER ONE

Preliminary Statement

This dissertation has two closely connected objectives. First, to state the ecological or economic rationale behind the formation of certain social groupings among the Netsilik and Povungnituk Eskimos, and second, to test the applicability in the Eskimo area of a hypothesis formulated by Julian Steward and Robert Murphy regarding the development of the basic functioning groups among the Northeastern Algonkians in Canada and the Mundurucu of the Amazon Basin:

> When people of an unstratified native society barter wild products found in extensive distribution and obtained through individual effort, the structure of the native culture will be destroyed, and the final culmination will be a culture type characterized by individual families having delimited rights to marketable resources and linked to the larger nation through trading centres. (Murphy and Steward, 1956, p. 353.)

The anthropogeographic perspective adopted throughout this study of a Netsilik Eskimo group living on the Arctic coast and the Puvirniturmiut of East Hudson Bay (*see* Map 1) differs somewhat from previous analyses of Eskimo adaptation to a rigorous environment. Many travellers in the North have marvelled at the ability of the Eskimo to scrape a livelihood from the Arctic wastes. This he did with the help of an elaborate technology and certain ingenious devices such as the snowhouse, the kayak, and waterproof clothing. This ability of the Eskimo is well expressed by Weyer: "The Eskimo is a cultural success. He survives further north than any other people on earth, in exceedingly wretched and difficult conditions—an exemplification of man's cultural adaptability to nature in the raw" (Weyer, 1956, p. 50). The ingenuity and elaborateness of Eskimo technology was exhaustively described in a number of earlier contributions. There the student could learn about the numerous uses of some materials found in the country, such as snow, ice, driftwood, and stone, and the way certain parts of game, such as skins, blubber, and bone, were employed. This highly specialized technology was considered as the central factor explaining the secret of Eskimo adaptation to the Arctic environment.

In the present dissertation a somewhat different perspective is adopted. The importance of technology is duly recognized, and sections on hunting, fishing, and trapping techniques may be found in each of the three chapters of this study.

An attempt is made, however, to move one step further to discover what technological, economic, or purely social factors, if any, determine the extension, composition, and functions of the basic socio-economic groupings of our two Eskimo communities. The aim is to demonstrate, through the use of a particular technology, precise relations between the arctic environment and certain social forms. My approach is thus broadly ecological, centred upon the study of the complex and dynamic equilibrium between two human groups and their habitat. Considering that the Eskimos, until recently at least, were pure hunters, particular attention has been given here to the availability and seasonal distribution of game. Not only is the specialized character of Eskimo technology impossible to understand without reference to certain habits of the useful fauna, but the whole pattern of Eskimo annual migrations remains meaningless if unrelated to game distribution.

In my search for the factors that may determine the formation of socio-economic groups, it appeared that certain hunting and fishing techniques, in close relation with some obvious game particularities, have a direct bearing upon the constitution of large or small human gatherings. Thus winter seal hunting at the breathing holes among the Netsilik, of necessity a collective activity, determined the formation of large camps on the flat ice. This explains the necessity for a systematic survey of all or most subsistence techniques to be found in this dissertation. These have been studied mainly as individual or collective activities involving various forms of collaboration and leadership. In comparing individual to collective activity it should be noted that the distinction refers only to overt behaviour, the objective situation, which is an arrangement of concrete activities as the observer sees it. Collective behaviour is not associated here with the people's common motivations, values, and goals, "the pattern of assumptions that guides their perceptions, the network of meanings that binds their percepts into a semblance of a system, the hierarchy of values animating their actions" (Paul, p. 442). Or, as Margaret Mead puts it: "It is necessary for the student to keep this definition of *individualistic* in mind. It must not be confused with 'rugged individualism,' or given the aura of exploitation of others, or aggression toward others, which surrounds the work in current speech. Furthermore it was necessary to distinguish between *collective* and *individual* activity, terms that refer only to modes of overt behaviour but not to goals. This second classification is purely objective and does not take into consideration the motives of the participants" (Mead, p. 16).

The study of collective subsistence techniques leads to the description of the basic socio-economic units in these two Eskimo communities, the first aim of this dissertation. It is necessary here to state what categories of social facts are comprised under the concept of a basic socio-economic unit. Taking into consideration the objective character of collective activity as previously defined, this concept refers to the extension, composition, and functions of the concrete social units constituted in the fields of production, distribution, and consumption of strategically important goods. The term 'extension' has a quantitative connotation, meaning the total number of individuals comprised in the work group, the food sharing circuit, or the commensal unit. The term 'composition' refers to the specific kinship relations existing between the members of the economic groupings, and the term 'function' signifies simply "oeuvres à accomplir" (Gurvitch, 1955, p. 30), the concrete objectives pursued by the groupings. The functions of the socio-economic units concern essentially three major fields of activity and rights—obligations leading to action—first, food acquisition, e.g., caribou or seal hunting parties, fishing camps; second, certain patterns of ownership, essentially the sharing of game returns. A distinction will be made later between rigorous sharing of food governed by precise norms and occasional gifts of meat to needy relatives. Ownership of weapons, tools, various household utensils, clothing items, and transportation devices will not be considered, since by their very nature these can be only individually used and consequently are individually owned. Only the most important food-sharing patterns will be described. This leaves out certain traditional exchange partnerships between people with similar names, gifts made during ceremonial occasions, and various in-group or out-group trading activities. Commensality is the third major criterion defining a socio-economic unit in the field of food consumption. Further, only the economics of the strategically important animal species, vital to the subsistence of the Netsilingmiut, will be taken into account.

In the fields of food acquisition, distribution, and consumption, several socio-economic units of importance have been distinguished for the traditional Netsilingmiut alone. The extended or joint family, the winter sealing camp on the flat ice comprising several extended families, and the nuclear family (in different seasons) in varying circumstances and fields of activity tended to constitute important socio-economic units. The enumeration of these basic socio-economic units is preceded by a brief description of the ego-centred kindred among the traditional Netsilik, and this despite the fact that the kindred or extended ilagiit had no visible economic functions. It is felt however, that a brief analysis of the kindred may constitute an introduction to the survey of Netsilik socio-economic organization by simply showing the significance of maximal extension of kinship bonds. Further, it seems convenient to contrast the kindred and the extended family, the characteristics of the latter thus becoming more easily recognizable.

Despite the numerous examples describing, dating, and localizing hunting techniques and socio-economic units, it is necessary to further integrate these systematic enumerations within the framework of the annual cycles. This is done with the conviction that placing the previously isolated traits in the context of the concrete unrolling of the migration circuit enhances their comprehension.

Briefly, the approach adopted here being ecological, aiming at the discovery of ecological and economic factors as determinants of certain social forms in a developmental perspective, discussions of purely kinship and descent problems have been pushed aside. This framework differs considerably from the centre of interests found in Robert Pehrson's book: *The Bilateral Network of Social Relations in Könkämä Lapp District* (1957). In a different paper Pehrson (1959) has attempted to conceptualize the bilateral kin groupings among the Lapp as a structural type considering sibling solidarity expressed in the terminology and in behaviour as a central element. Lapp residence patterns appear as truly bilocal, a number of factors favouring either uxorilocality or virilocality. It is clear that a study of an alignment of kinsmen *per se* or an analysis of marriage rules among the Eskimo would have shifted our interests from ecology to the general sphere of interpersonal relations where extra economic factors such as shamanistic practices play an important role. This probably would have enriched the present dissertation allowing for a higher level of abstraction. However, the inherent dangers of handling too many variables simultaneously and of confusing different orders of social reality convinced me it would be wise to adopt a more limited approach: "Pour l'ethnologue la société enveloppe un ensemble de structure correspondant à divers types d'ordres. Le système de parenté offre un moyen d'ordonner les individus selon certaines règles; l'organisation sociale en fournit un autre; les stratifications sociales ou économiques, un troisième" (Lévi-Strauss, 1958, p. 347). This then is a limited study dealing with only one level of socio-economic organization.

The second objective of this dissertation is concerned with testing a hypothesis formulated by Julian Steward and Robert Murphy (Murphy and Steward, 1956) regarding the development of the basic functioning groups among the Northeastern Algonkians in Canada and the Mundurucu of the Amazon basin. Although the conclusion of this work is almost entirely devoted to a discussion of the Steward and Murphy hypothesis, it may be appropriate to introduce here a few preliminary statements.

After surveying the contributions of Cooper (1939), Leacock (1954), Eiseley (1947), and Speck (1915, 1939) to the ethnology and acculturation of the Northeastern Algonkians, Steward distinguishes four major acculturative periods for the recent history of these Canadian Indian groups: pre-fur, marginal involvements, transitional, and culmination phases. Traditionally the Montagnais lived in nomadic composite bands, hunting large migratory game animals. By the end of the acculturative process, which was characterized by the decrease of subsistence hunting and the growing importance of trapping furbearers, the composite bands had ceased to exist as functioning units. There is a tendency for the individual family to have delimited rights to marketable resources and to function as the basic economic unit in all seasons. There is an effort to examine historically the relations between the three functionally connected elements: subsistence hunting, trapping, and basic units, together with some related variables. In this dissertation an attempt has been made to bring to the Eskimo area Steward's discussion of Montagnais social units. Simply stated, the question is this: Did the fur trade have the same effects among the Eskimo as it had among the Montagnais? Or, more precisely: Did intensive trapping among the Eskimo see the emergence of the individual family as the only socio-economic unit of importance? And still further: Can we establish a parallel between each of the Montagnais and Eskimo acculturative phases? In order to answer these questions, one condition has to be fulfilled: one or more Eskimo groups must be surveyed with this historic objective in mind. This has been done in the present dissertation by sequentially arranging the three Eskimo 'communities' under analysis on the basis of the growing importance of trapping furbearers, which factor is the main causal one for socio-cultural change.

In the first chapter a picture of traditional Arviligjuarmiut society is presented; this is characterized by intensive hunting and no trapping whatsoever. In the second chapter, the contemporary socio-economic organization of the Arviligjuarmiut is summarized, marked by marginal trapping. Finally, in the third chapter, the intensive trapping economy of the Povungnituk Eskimos is outlined. It should be pointed out that in this sequence the case of the Povungnituk Eskimos is of central importance. When one considers their highly developed trapping economy, it can be seen that they represent the culmination of the acculturative process, which should be characterized, according to Steward, by profound organizational changes. It will be shown in the conclusion of the present dissertation that the evidence from the Eskimo area fails to corroborate the Steward-Murphy hypotheses. The three functionally connected elements (subsistence hunting, trapping, and basic units), when examined developmentally in several communities, tend to behave as independent variables. I believe this statement is supported by the data contained in the present dissertation.

In transcribing Eskimo names, an effort has been made to follow as consistently as possible G. Lefebvre's draft orthography for the Canadian Eskimo (Lefebvre, 1957). Thus /e/ and /o/ have been replaced respectively by /i/ and /u/, /rk/ and /kr/ by the uvular plosive /q/, /y/ by /j/. The false geminates, due to an emphasis peculiar to the Canadian Eskimo /ss/, /nn/, and /kk/, are simplified to /s/, /n/, /k/. There are only three phonemic functional vowels: /i/, /a/, and /u/. /e/ is considered as an uvularized allophone of /i/ in front of an uvular consonant like plosive /q/ or a closed allophone of /a/ in front of a dental consonant like /n/ or /s/. Between vowels, /g/ is not plosive but fricative. There is only one functional /s/ appearing as strongly alveolarized. Vocalic length is phonemic, e.g., tuurnaq.

Whenever an Eskimo name has entered standard usage as introduced by a major author, no attempt has been made to make changes, e.g., Rasmussen's Ne̱tsilingmiut in the place of Na̱tsilingmiut.

CHAPTER TWO

The Arviligjuarmiut, Hunters of Pelly Bay, the Traditional Situation

> *"Cut off from the surrounding world by ice-filled seas and enormous trackless wastes, a little handful of people calling themselves Netsilingmiut (the Seal Eskimos) have been suffered to live their own life, entirely untrammelled by outside influence, right up to the present time."*
>
> KNUD RASMUSSEN
> *(The Netsilik Eskimos)*

The Arviligjuarmiut, a branch of the Netsilik Eskimos, inhabit the region of Pelly Bay, the southwestern arm of the Gulf of Boothia. Pelly Bay is a stretch of water sixty miles long and fifteen miles wide. It is generally surrounded by Precambrian hills. Eastward, beyond the coastal hills, extends the flat country of Simpson peninsula. Two large rivers, the Arrowsmith and the Kellett, have their estuaries near the southern end of the bay. A number of lesser streams empty their waters into the bay. To the north a chain of islands form a barrier to the southwardly drifting ice. The surrounding country is covered by a very large number of lakes of different sizes (*see* Map 2 for a representation of tundra topography).

As early as October the sea begins to freeze. The sea-ice does not disappear until the end of July. The environment is arctic, characterized by great cold in winter (mean daily temperature in January below —20°F) and a cool summer (mean daily temperature below 50°F) (Kimble and Good, p. 73, 74). The Pelly Bay area lies entirely in the arctic tundra biogeographical zone; "the tundra bears no trees and its vegetation consists of creeping shrubs, tufted grass-like plants, lichens and mosses" (Kimble and Good, p. 86).

GAME DISTRIBUTION

In the following paragraphs some of the available information on the distribution of the main animal species useful to the Pelly Bay Eskimo prior to the general use of the rifle in the '20's is summarized. It should be noted from the outset, however, that some of the Pelly Bay people frequently migrated to the adjoining areas for various reasons, one being the search for better hunting grounds. I feel compelled thus to include in the descriptions Committee Bay, Boothia Isthmus, and the region west of Thom Bay.

A. Macpherson has brought together all the available evidence on the past and present distribution of the caribou (*Rangifer arcticus*) in the Netsilik area (*see* Macpherson, 1960, p. 14). The observations made by the early travellers in the period 1829 to 1869 point to the existence of definite caribou migration patterns on Boothia Peninsula. Macpherson writes: "The cows arrived in mid-April, the bulls in mid-May. Many cows and calves occupied the area in early June. In late June caribou were very common around the large lakes on Boothia Isthmus. Apparently caribou were rare or absent in the area in July and August. A few were seen on the return migration in September . . . . Animals recorded in October and later were presumably the 'stragglers' which wintered in the region . . . ." The records as a whole suggest that the Precambrian upland which meets the east coast at Lord Mayor Bay and Thom Bay was a fawning ground of caribou migrating from the South, many of which summered around the large lakes of Boothia Isthmus, but that caribou were also resident in Boothia Peninsula and the Murchison River country (Macpherson, p. 7, 8). The data collected from elderly Pelly Bay informants fully corroborate Macpherson's analysis. The best caribou hunting grounds of the Netsilik Eskimos have been in the area of the Boothia Isthmus and immediately north of the following three inland water masses: Lady Melville Lake, Netsilik Lake, and Willersted Inlet. The number of habitual hunting spots at the crossing places may be considered as an indication of the number and importance of migrating herds. Thus in the Boothia Isthmus area, nine such crossing places (nadluq) were identified, and on Simpson Peninsula only one artificial nadluq was used (*see also* Rasmussen, p. 23, 108). Kringhorn, an elderly Eskimo who had travelled widely in the area, said: "In the old time, the people from Itsuarturfik (Thom Bay) and Netsilikilani (Rae Strait, Shepherd Bay) used to say that Arviligjuar (Pelly Bay) was a very good place for seals and fish, but not at all good for caribou because there was only one nadluq here. Some of the Pelly Bay people didn't even have a bow, they had only kayaks (used at that particular caribou crossing place). For that reason these people didn't like Pelly Bay very much." Further, the herds on Simpson Peninsula were much smaller than the large migratory bands of Boothia Isthmus.

In 1958 Rev. Frans Van de Velde, the resident missionary at Pelly Bay, compiled a list of 662 place-names of the Netsilik area known to Pelly Bay informants (Van de Velde, 1958*a*). This list, which usefully supplements Rasmussen's *Netsilik Eskimo Topography* (Rasmussen, p. 91–113), contains considerable information on many locality characteristics. Forty-six areas are considered to have been traditionally good places for caribou hunting. In eighteen localities caribou were speared from kayaks, and for five points the presence of stone constructions protecting bowmen is mentioned. This indicates the abundance of the caribou during certain seasons in many areas of the Netsilik country prior to the third decade of our century. Following the establishment of trading posts on the migration routes and the consequent general use of rifles, the caribou migration ceased in the years between 1920 and 1930.

There is substantial evidence of the presence of musk-oxen (*Ovibos moschatus*) in the Netsilik area prior to the 1920's. John Ross, who passed four winters on the eastern side of Boothia Peninsula in the years 1829 to 1833, met Eskimos who informed him that there were plenty of musk-oxen on the hills to the south (probably the area southwest of Thom Bay, Ross, p. 252). Dr. Rae notes in 1847 that the region around Point Hargrave, at the southern end of Committee Bay, "is a favourite resort of the musk-ox as soon as the snow disappears" (Rae, p. 101). Twenty-two years later, Hall describes a spring musk-ox hunt with guns around Ellice Mountains, southwest of Pelly Bay. During the second week of June 1869, Hall participated in a highly successful hunt in the vicinity of Cape Weynton on the west coast of Committee Bay: "As many as fifty musk-cattle were at one time seen in bands on the hill-sides. In one battle twenty-one were slain . . ." (Hall, p. 411). Later, during the wintering of the Gjøa near King William Island (1904–06), Talurnaktu, a Netsilik helper employed by the expedition, informed Amundsen that he had been to Repulse Bay and had had many encounters there with the musk-ox (Amundsen, vol. I, p. 231). At a still later date, Rasmussen, travelling across Simpson Lake in April 1923, writes: "At Simpson Lake we came across deserted snow huts and staging of snow on which three kayaks had been deposited. Inside the huts were musk-ox skins waiting to be taken away. Not only do the Arviligjuarmiut hunt caribou in late summer and autumn in this neighbourhood, but the country round about is famous among the Eskimos because it is the only region where it is profitable to hunt methodically the musk-ox, taking the hunters right up towards Hayes River on the northeast of Back River" (Rasmussen, p. 33).

The evidence assembled here suggests that the musk-ox in traditional times was to be found in many areas in the Netsilik country, with possibly the highest concentration in spring on the west coast of Committee Bay, and also west of Pelly Bay in the valley of Simpson Lake and the surrounding hills. In both these areas it was hunted by the Arviligjuarmiut. The topographic record of Van de Velde mentions five areas where in the past musk-oxen were abundant: Kalusarvit (long. 90° 50′W., lat. 68° 30′N.), a hilly region along Becher River on the west side of Pelly Bay; Kunnuaq (Hayes River), flowing into Chantrey Inlet; the Uqpik hills (long. 89° 50′W., lat. 68°30′N.), on the western side of Simpson Peninsula where as late as 1938 two musk-oxen were killed; the Tinguqjuaq hills (long. 92° 10′W., lat. 68°20′N.), along the left bank of Murchison River; and the Ukiturliq mountains (long. 91°14′W., lat. 68°58′N.), west of Pelly Bay where musk-oxen were particularly abundant in winter. The problem of the relative importance of the musk-ox in the traditional economy of the Eskimos will be discussed later. Presently, no musk-oxen are to be found in the country of the Netsilik. Recently, during some extensive caribou hunting expeditions, Pelly Bay hunters have seen small herds of this highly protected animal only in the area south of Walker Lake and the upper region of Hayes River.

Of far greater economic importance to the local Eskimos was the ringed seal (*Phoca foetida*). According to our informants, seals were to be found in many bays and straits on the Netsilik coast. In three areas, however, seals were particularly abundant and still are: (a) the central and northern parts of Pelly Bay, where the winter sealing camps of the Arviligjuarmiut were located, and along the east coast of the Harrison Islands; (b) at Itsuarturfik (near Lord Mayor Bay) where a particular winter sealing technique over ice cracks was used (*see* Rasmussen, p. 161); and (c), the Shepherd Bay – Rae Strait area where large sealing camps were located by Hall in 1869 (p. 396), by Rasmussen in 1923 (p. 35, 153), and by Burwash in

1925 (p. 30). Pelly Bay informants seemed little acquainted with sealing conditions farther west. They all agreed that Pelly Bay is an excellent sealing area and that there is no noticeable decrease in the seal population of the bay. Van de Velde's record of place-names lists twenty reputedly-good sealing areas in the Netsilik country. Some of these will be described in relation to the traditional and post-traditional migration cycles of the Arviligjuarmiut.

The bearded seal (*Erignathus barbatus*) was reported to be abundant in Logan Bay (Kangiqluk) between Helen Island and Simpson Peninsula. The shallow waters of this bay, rich in marine fauna, apparently are particularly congenial to this species.

Various species of fish were, and still are, of fundamental importance to the subsistence economy of the Pelly Bay Eskimos. Arctic char (*Salvelinus alpinus*), a trout-like fish, seem particularly abundant in several streams and larger rivers flowing into Pelly Bay, Committee Bay, and the countless fjords between Harrison Islands and Lord Mayor Bay. The first part of July, during the downstream run of the Arctic char, and the second two weeks of August during its return journey to the inland lakes were the best fishing periods for this species. Many deep-water lakes abounded in lake trout. Van de Velde lists over fifty locales as good fishing points. On Simpson Peninsula, the area around Pelly Bay, and southeast Boothia Peninsula, over fifteen stone weirs for Arctic char were used in different periods. The best fishing grounds of the Arviligjuarmiut were located along the lower part of Kellett River (called Kuuq, meaning 'the river') where large numbers of Arctic char were caught and cached in October under the thin autumn ice. Up to the present time the Kellett River fishing period was of central importance in the migration cycle of the Arviligjuarmiut. As Rasmussen has pointed out, the Arctic cod (Rasmussen, p. 186) is an emergency food in famine years in some locales. It appears to be very scarce in Pelly Bay where it has never been systematically fished.

This completes the list of the main animal species traditionally utilized by the Pelly Bay Eskimos. There were numerous other mammals and birds hunted by the Eskimo, but these did not contribute to their diet to any great extent. In the past and up to the present time, polar bears (*Thalarctos maritimus*), a dangerous game for the Eskimos, were abundant in many areas. Van de Velde's record indicates eleven hunting grounds for polar bears, generally distributed in a southeasterly direction from the Astronomical Society Islands in Lord Mayor Bay, north of the Harrison Islands, and all along the eastern shore of Simpson Peninsula. It is thus in the southwestern region of the Gulf of Boothia that polar bears are to be found, near the permanently open sea-water.

The distribution of foxes (*Alopex lagopus*) seems to be irregular. Generally they are found near the ice-edge along the southwestern end of the Gulf of Boothia where they feed on the seal carcasses left by the polar bears. Van de Velde's topographic record indicates the Murchison River Valley as particularly rich in lemmings and consequently in foxes. At Sijjartalik (long. 90° 10′W., lat. 67° 50′N.) near Kellett River, fox dens are numerous, as they are in the Tunirtat hills (long. 89° 12′W., lat. 68° 14′N.) and in the area around the Ublasaulikjjuaq Lake (long. 93° 40′W., lat. 69° 43′N.) on Boothia Isthmus.

The distribution of marmots (*Spermophilus undulatus*) also seems irregular. Not a single reference to marmots is to be found in Van de Velde's topographic record. Rasmussen mentions an Eskimo who intended to snare marmots regularly around the hills north of the estuary of Kellett River (Rasmussen, p. 31). It is possible to conclude that they were probably plentiful in that region.

Similar remarks can be made in regard to the Arctic hare (*Lepus arcticus*), caught in snares around the camps. Being of wide distribution and of minor economic importance, no particular area is considered as markedly favourable to hare snaring.

Bird catching in the Pelly Bay area is a minor activity. In regard to hunting feathered game in the general Netsilik region, Rasmussen writes: "It is of no great importance, however, and at any rate is not a food on which they count as it is only obtainable at chance times" (Rasmussen, p. 187). Van de Velde's record mentions only two locales where Eider ducks (*Somateria spectabilis*) are hunted: Mitirsiurvik (long. 90° 56′W., lat. 69° 13′N.), a small lake on an island south of the Harrison Islands, and Ulukaumavik (long. 89° 56′W., lat. 68° 27′N.), a series of lakes at the end of a fjord in the southeastern part of Pelly Bay.

Similar remarks can be made in regard to ptarmigan distribution and hunting. In the immediate Pelly Bay area, informants were unable to indicate any area favourable to ptarmigan catching. Van de Velde's record mentions only two large areas on West King William Island and South Matty Island where ptarmigan were abundant. The fact that at the present time the Pelly Bay Eskimos own no shot guns may be considered as proof of the minor importance of bird hunting in the area.

TRADITIONAL HUNTING TECHNIQUES OF THE ARVILIGJUARMIUT

In this section a brief description of the main traditional hunting and fishing techniques known by the Arviligjuarmiut will be presented. An effort will be made to localize the geographic points where a given technique was used with most efficiency. Considering the wide range of migration of the Arviligjuarmiut, this survey will include areas outside the immediate Pelly Bay region. Later it will become apparent that during a given traditional annual cycle these Eskimos used only a certain number of hunting and fishing techniques. This is explained by the fact that certain techniques were developed for use only in specific areas, and if these happened to lie outside the migration route a necessary selection of techniques was used by the hunters. In the following pages, however, there will be described most of the food-procuring methods known to elderly Pelly Bay informants as being employed by their people in ancient times, when no rifles were available. Throughout this section a distinction will be made between individual acquisitive techniques and collective activities controlled by a leader.

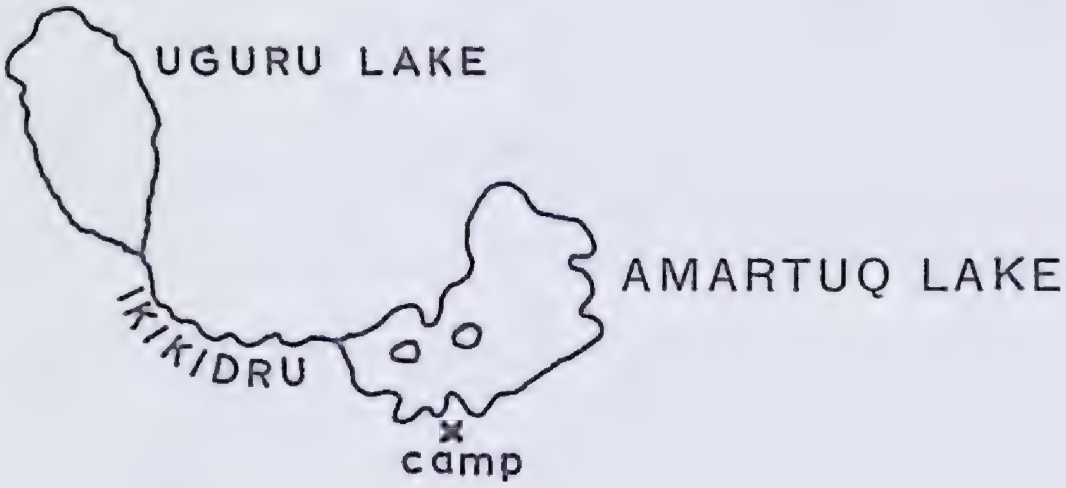
Caribou Hunting

The Arviligjuarmiut were acquainted with a number of caribou hunting techniques. Most important among these was the hunt from kayaks at the lakes and rivers habitually crossed by the caribou herds during their autumn southbound migration. Anirnilik, an elderly Eskimo, originally from Lord Mayor Bay, gave the following description of the last hunt he saw in 1918 at the crossing place (nadluq) when he was about 15 years of age. This took place at the southern end of Tigluarvik (Krusenstern Lake) on Boothia Isthmus, where on the northern shore of the lake there is a small peninsula. The crossing of this narrow by the herds was facilitated by two small islands in front of the peninsula. The caribou migrating along the northern shore of the lake were easily seen by the hunters concealed behind three semi-circular stone walls (ukkuutak) on top of a hill. Six hunters participated in that hunt, two behind each shelter. Their six kayaks lay on the beach, their bows in the water, each one concealed between two stone walls about one foot high. As soon as the hunters saw the herd approaching, they crawled to their kayaks and lay down along the left stone wall, holding the kayak through the manhole (paa) with the right hand. As soon as the herd was in the water, they jumped in the kayaks, "then everybody went for himself, paddling as fast as they could, there were few hunters in front and many behind." The long spear was used (kaput) to wound or kill the swimming caribou, preferably in the kidney region. Hitting the bones was avoided.

Kringhorn, an Eskimo from Netsilikilani, added the following details on a similar hunt he had observed in 1916 when he was about ten years old. Four hunters were waiting in a round structure about six metres in diameter and one metre high. There were no stone walls around the kayaks as the caribou are generally not frightened by the sight of the kayak ashore. The best hunter gave the signal for the start. The caribou were speared in the kidneys or the buttocks. The wounded animals were pursued on the shore. Speed in paddling was essential to success. The fast kayaker could kill easily up to ten caribou of a single herd. Often the slow paddler got a much smaller catch if any at all. At the end of the hunt the dead animals were tied together by their antlers and left in the water to be pushed ashore by the wind. The butchering executed by the men took place nearby. The hunters took the skin, most of the fat, the meat from the back and the limbs, and the fat guts. The carcass was stored in square or round stone caches.

This method, called nadlursiugtut (hunting at the nadluq) and described by numerous ethnographers and explorers, is conspicuous by the absence of beaters, and it represents the true technique of hunting at the caribou-crossings along the route of migration of the herds. Besides the giving of the starting signal by the best hunter, our informants clearly stated that there was no attempt at coordinating the efforts of the kayakers during the process of spearing the caribou. This method may be characterized as an essentially individual technique, practised simultaneously by several kayakers and involving very little coordination.

Considerably more complex is the method involving the collaboration of kayakers and beaters. Here is a description of this technique by Kringhorn: The place is Lake Amartuq, at the southern end of Simpson Peninsula. Kringhorn observed this hunt at the artificial crossing place for the last time in 1918, when he was 12 years old. There, six hunters were camping together. They had five kayaks and only one gun, which was rarely used because of the irregular supply of ammunition. A father and a son shared a single kayak. A narrow stream called Ikikidru, about three or four feet deep, ran between Amartuq and Uguru lakes. Thus it was quite easy to travel on kayak between the two.



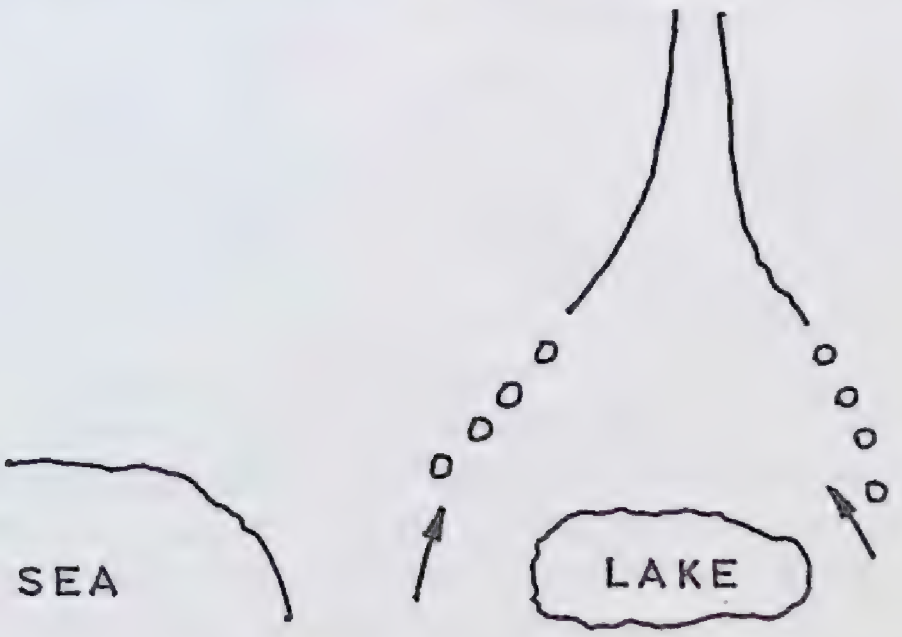
The camp was set on a hill on the southern shore of Amartuq, from which point the country to the north was easily visible. The caribou hunt in this area would start around the middle or end of August. Two young beaters (ungurijarktut) would walk in the flat country north of the two lakes at a distance of ten or twelve miles in search of caribou. As soon as they would sight the game they would part and approach the herd from behind on both sides, and by imitating the cry of the wolf they would direct it toward the hunters. There were two crossing places on the lakes where the kayakers used to wait. When the wind blew from the west, they would place the kayaks on the eastern side of the narrow peninsula, on the northern shore of Amartuq Lake. With an eastern wind, the kayakers would wait at the northeastern end of Uguru Lake. Although the hunters lying on the beach could not see the approaching caribou because of the hilly nature of the area, they could be easily seen by the women in the camp on the opposite shore, who would signal to the hunters the movements of the herd. As soon as the herd was driven into the lake by the beaters, the kayakers would go into action, while the women and children, waving pieces of clothing in their hands and shouting, would run around the lake trying to push the caribou back into the water, to be speared by the hunters.

Kanajuk, who was born in the Pelly Bay area, observed similar hunts in several lakes on Simpson Peninsula (called Saatuk or the flat country) with only one or two kayaks. As soon as the migrating group perceived a small herd of caribou near a lake, an effort was made to push them into the water and spear them from the kayaks. A special technique called atanirmiujuk was known. When the herd was to pass over a narrow isthmus between two lakes, a man would lie there in ambush and suddenly would jump and frighten the animals approaching in front of him and drive them into the lakes.

Many authors have described similar drives (Birket-Smith, 1929, vol. 1, p. 109; Jenness, 1922, p. 147). Only Boas, however, distinguishes briefly between the two types of caribou hunting described here: "In many places the deer in their migrations are in the habit of crossing the narrow parts of lakes, and here the natives lie in ambush with their kayaks. In other places they are driven into the water by the Eskimo and attacked by the drivers or by hunters stationed on the Lake" (Boas, 1888, p. 501).

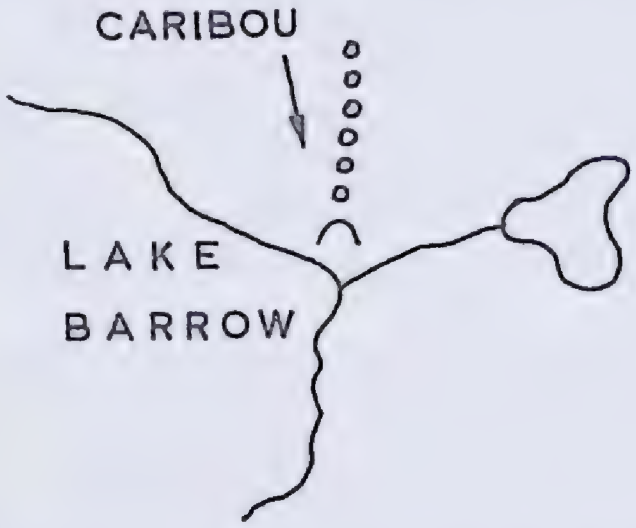
This second method conducted at the artificial crossing places was more complex and necessitated collaboration of beaters, signallers, and kayakers. It indicates a certain division of labour which may be considered as a co-operative technique involving all the members of the group, including children. It was used mostly on Simpson Peninsula where caribou herds were small and no natural crossing places apparently existed, and where, considering the flat topography of the area, stalking caribou with the bow was not practicable. Although it usually provided the hunters with a sufficient number of light summer skins for clothing, it was considered a method which rewarded the people with much smaller returns than did the hunts at the natural crossing places. It remained, however, the best caribou hunting technique for the Pelly Bay area.

The Arviligjuarmiut were acquainted with other caribou hunting techniques. Most interesting was the one associated with the use of taalun, stone constructions to conceal the archers. Several variations of this technique were known. At Talurkjuarq (the big hiding place), now Spence Bay settlement, near the sea, there existed a remarkable structure consisting of two slightly-curved stone walls over 70 feet long leading to a narrow passage only 5 or 6 feet wide. At their opposite end the continuous walls were prolonged by some stone cairns (inuksuk). A small lake was to be found in front of the system.



A single man, armed with a heavy spear (iputuru) generally used for killing polar bears, waited at the upper end of the walls. Qipingajuk, an old Pelly Bay Eskimo who witnessed a hunt at that place after the turn of the century, informed me that a large number of beaters were necessary for this hunt, usually up to fifteen individuals, who would drive the herd around the lake towards the large opening of the stone walls. At the end of the taalun the caribou were easily speared. The animals who went astray and reached the bay were speared by the kayakers lying in ambush. This taalun was believed to have been built by the Tunit (the pre-Eskimo occupants of the country). The spearer was usually the poorest kayaker or archer of the tribe, and this hunting method was employed in order to provide him with the skins he could not secure in any other way. A poor hunter never shared a catch thus secured by him.

At the southeastern end of Lake Tasirujuaq (Lake Barrow) a different taalun was to be found. It consisted of a simple semi-circular stone wall behind which one or two archers lay in ambush. The caribou were driven by beaters all along a line of stone cairns toward the taalun.



According to the topographic record of Van de Velde, similar taalun were to be found in the following places. Tasirujuarutit (long. 90° 43′W., lat. 69° 27′N.), a narrow strip of land north of Harrison Islands; Itiblinuaq, just north of the previous taalun; and Taaluardjuk (long. 93° 37′W., lat. 69° 34′N.), a small lake northwest of Spence Bay.

A third individual method of caribou hunting behind a taalun did not involve the participation of beaters. Anirnilik, an Eskimo originally from Lord Mayor Bay, described his last experience with this hunting technique in 1913, when he was about 10 years old, at Tikiraargjuk, in the hilly area southwest of Lord Mayor Bay, thus: Usually the hunters preferred a narrow valley habitually crossed by small wandering herds. First the hunter observed the movements of the herd from the top of a mountain. As soon as he noticed a few individuals slowly moving towards the valley, he rushed down towards a hollow place, usually on the side of the valley, and then hastily built a semi-circular taalun around it. The hunter kept his bow horizontally on top of the stone wall, and when the caribou approached he lifted his bow a little and shot. This was essentially a summer method and was practised by individual hunters. It was exceptional for more than one caribou to be secured in this way since after the first shot the small herd became frightened and ran away. The valleys where this technique was employed were well known and were usually within one or two days walking distance from the main camp-sites. Simpson Peninsula, being generally flat, offered no opportunity for hunting with the bow.

The first two techniques of hunting with spears or bows behind a taalun may be characterized as cooperative techniques, organizationally not much different from the caribou drives into lakes. The last technique is individual and can be employed by an isolated hunter. The taalun systems of caribou hunting among the Netsilik are not very different from those described by

Birket-Smith for the Caribou Eskimos (Birket-Smith, 1929, p. 111), Boas for the general area of the Central Eskimos (1888, p. 509), and Jenness for the Copper Eskimos (1922, p. 149). Pelly Bay informants considered taalun hunting to have been generally inefficient, rewarding them with poor returns. There were apparently only a few good archers among the Arviligjuarmiut, an impression confirmed by Rasmussen: "A record of ten archers showed that scarcely any one of them could hit the mark with anything like certainty at a range of about twenty meters and it is difficult to get so near to caribou" (Rasmussen, 1931, p. 170).

This technique applies particularly to stalking, which was a difficult art, little different from the simplest form of taalun hunting. Usually two hunters cooperated near a valley where caribou were to be found. As soon as the game was seen moving along the slope of the hill, on top of which both archers were stationed, the better hunter would crawl quickly downhill towards the herd, making full use of the rocky topography. When the wind was favourable, he could safely approach the small herd and from a short distance wound a caribou. The second and less skilful hunter would meanwhile observe the direction taken by the frightened animals and would run towards them trying to place himself in front of them to shoot his arrow. Only rarely was more than one animal shot this way. (For a vivid description of two Netsilik archers stalking game *see* Rasmussen, p. 58, although the author does not state whether bows or rifles were used during that expedition.) Single hunters also used to stalk caribou, preferring narrow valleys not too far from their camps. This was a summer hunting method, since in winter "the creaking snow made it quite impossible to get within suitable range" (Rasmussen, p. 171).

Still another caribou hunting technique was used by the Arviligjuarmiut on the thin autumn ice. This method was called ibjuuraktut and was employed at the caribou crossing places on Boothia Isthmus. The herd would move towards a small peninsula on the lake. The hunters would hide nearby. When the caribou would reach the peninsula and start to walk over the thin lake ice, the hunters, first crawling and hiding, would move cautiously behind the herd, and then suddenly jump and start driving the frightened animals towards an area in the lake where the ice was particularly thin. Under the weight of the galloping caribou the ice would break easily. Once imprisoned in the water, the caribou would try to climb over the ice using their fore limbs, but without success, since the ice was continually breaking. The exhausted animals were speared. This was considered a dangerous hunt since the ice could also break under the feet of the hunters. The Pelly Bay Eskimos still remember such an accident taking the life of a young hunter. This interesting method was employed anciently by several Eskimo groups (For the Caribou Eskimos, *see* Birket-Smith, 1929, p. 110, and for the Netsilik of Simpson Strait, Klutschak, p. 130).

No information was secured among the Pelly Bay Eskimos on the ancient use of snow traps for caribou. When one considers, however, the description of such traps by Rae among the Aivilik Eskimos (Rae, p. 135) and by Klutschak for the western Netsilingmiut (Klutschak, p. 131), there is little doubt about their traditional use by the eastern Netsilik. Caribou snares, as described by Stefansson for the Point Barrow Eskimos in northern Alaska (Stefansson, 1919, p. 385), seem to be a western Eskimo trait, unknown to the Netsilik.

This is my complete list of the traditional caribou hunting techniques known to the Arviligjuarmiut. Almost all these methods were employed during the warm season of the year and point to a summer inland adaptation of the Pelly Bay Eskimos. The different aspects of this inland summer adaptation will become plainly evident in later sections. Furthermore, in certain distinct geographic areas specific caribou hunting techniques were employed. Boothia Isthmus was the ideal territory for large-scale caribou spearing from kayaks at the natural crossing places and the big taalun drives. Off-season individual taalun hunting and stalking were practised in the hilly region west and northwest of Pelly Bay. On the flat Simpson Peninsula the only efficient technique was spearing at the artificial crossing places.

Thus various factors such as caribou migration routes, size of the herds, and topographic features influenced the choice of caribou hunting techniques. Some of these environmental factors also influenced certain organizational aspects of the hunting methods. Hunting at the natural crossing places did not require the collaboration of beaters. When the herds were small and wandering around in large open areas, beaters were active at the big taalun or at the artificial crossing places. This factor, combined with the proximity of narrow valleys, encouraged individual taalun hunting and stalking.

In summary, caribou spearing from kayaks was by far the most important and rewarding traditional technique. It was essentially a group activity necessitating different degrees of collaborative practices, depending on environmental factors. Individual and group taalun hunting together with stalking may be considered as secondary and complementary methods in order to provide fresh meat to a small circle of relatives. It is with the use of the spear, however, that the caches were filled and the clothing skins, so all-important for the dark season, were secured.

Sealing

Hunting seals was the principal occupation of the Netsilingmiut in winter and early spring. They were acquainted with several quite elaborate sealing techniques, all described in great detail by R. Amundsen, vol. 11, chap. VIII, pt. 11) and K. Rasmussen, p. 151-65). Although it seems unnecessary to repeat these descriptions here, a few comments on the organizational aspects of these methods do not seem inappropriate.

First Boas, studying the influence of geographical conditions upon the distribution of the Eskimo settlements (Boas, p. 460), and later Steensby (p. 71), have both noticed the importance of smooth ice for sealing. Seals are rarely to be found in areas of pack-ice; and, further, "sealing on rough ice during the winter is very difficult and unsuccessful, as it is hard to find the breathing holes and the travelling is very laborious. In every place where smooth ice is formed we find that natives either are settled or have been settled" (Boas, p. 460). Pelly Bay, sheltered from the drifting pack-ice on the Gulf of Boothia by the chain of islands in its northern part, is covered by fresh smooth ice every winter, thus offering good conditions for a large seal population, as do also certain restricted regions of Thom Bay. The country of the Arviligjuarmiut constitutes the best sealing area in the Netsilik country. Van de Velde's toponymy describes eighteen good sealing areas in the Netsilik country, of which no less than eleven are located in the central and northern parts of Pelly Bay.

The latter part of the winter was spent by the Arviligjuarmiut in sealing at the breathing holes. They used the maursurniq method of the Netsilingmiut, which is similar to the mauniq technique of the western Greenlanders (Porsild, p. 131). Hunting at the breathing holes was a highly developed art among the Netsilik Eskimos and necessitated the use of a number of special implements: the thrusting harpoon, made entirely of antler horn reinforced with sealskin thongs and carrying at one end a strong ice-pick used to enlarge the breathing hole after the seal had been caught; the harpoon point, generally made entirely of antler and only occasionally carrying a bear bone or a stone blade; the down or the horn indicators; two kinds of breathing-hole searchers; the ice scoop; the breathing-hole protector; the breathing-hole maker; the harpoon rests; wound pins; a hook to drag the seal; a small furry hunting bag to go under the feet of the standing sealer; the inevitable snow knife. (A complete collection of traditional maursurniq tools from Pelly Bay has been secured for the National Musem of Canada; *see also* Van de Velde, 1958*b*).

A seal has to move about over an extended area in order to catch a sufficient amount of food; thus it must keep open several breathing holes at a time. The chances of hunters getting a seal are considerably greater if several of the breathing holes are simultaneously watched. This factor explains the group character of maursurniq: the larger the number of sealers, the greater the chances for a successful hunt. The ecological basis for the considerable winter gatherings at the large camps on the sea-ice, described by explorers and ethnographers, becomes evident. Amundsen in 1906 counted about forty men taking part in a single hunting expedition on Western King William Island, although so many people may have been attracted by the Gjøa Expedition. In 1918 at the main sealing camp in the middle of Pelly Bay, about twenty men hunted together. In the spring of 1923 on the sea-ice of Kugguppa (Inglis Bay) Rasmussen visited a sealing camp with twelve breathing-hole hunters (Rasmussen, p. 153).

Decisions about the hunt were taken during a preliminary period of visiting and of discussion of intentions. When the sealing camp was large, the choice of the hunting area was made by the most experienced and successful older hunters and rarely by a single outstanding hunter. But the reverse was the case, however, when the hunters were fewer in number, often related, and there was present a sealer of exceptional ability, called natsirsurtunuaq (for a slightly divergent interpretation of leadership on the sealing camp, *see* Steenhoven, p. 16). Once on the ice-field, the hunters, each helped by a dog, spread over a large area searching for a breathing-hole. After such a hole was found, the hunter prepared himself for the wait. Immediately after catching the seal, the collective liver-eating practice took place. Then the seal was dragged to the igloos, where it was rigorously shared according to the complex Netsilik sharing rules, to be described later.

Breathing-hole hunting appears to be essentially a group activity, although the technique of catching the seal involves only a single hunter. It is preceded by the deliberation of elders, where informal leadership may be exercised, in an atmosphere of general excitement. Amundsen writes about a sealing party: "They have a great deal to talk about. One would think they were living in a world of stirring events, and offering a variety of topics for conversation and discussion, and not here in an ice field, which had been lying silent and desolate for aeons . . ." (Amundsen, vol. 11, p. 30). After the end of the hunt, important collective events took place connected with the consumption of the seal.

At a particular locale of Thom Bay, called Tuat, a unique sealing method called 'itertulerineq' is employed. Despite a good description by Rasmussen (p. 161), a few supplementary details may be necessary. At Tuat the sea currents form cracks in the winter ice, which constitute natural breathing points for the seals. First, the hunter builds a snow igloo over one of the open cracks. Then the hunt continues as follows: "That part of the crack in the ice that runs through the house is now entirely covered over with a piece of ice which has been worked so that in the middle there is a hole of just the same shape as a breathing hole. This piece of ice must be so thick that the artificial breathing hole may have a relatively wide opening underneath, whereas at the top it ends in the usual little 'blow hole' . . . For some reason or other the small man-made breathing-hole seems to have a special fascination for them (the seals), and in going up into it to breathe they are harpooned in just the same way as out in the ice in winter" (Rasmussen, p. 161). A similar technique can be employed along cracks which are covered with a thin layer of ice. Here a snow-hut over the ice crack is no longer necessary. The hunter cuts a hole one foot across in the thin ice. It is then carefully cleaned of snow or ice particles, and over it is fitted a circular wash-basin-like piece of ice of the same diameter with a small one-inch hole in its centre. The structure is covered with snow, and a down indicator placed in the artificial breathing-hole. Next, the hunter builds a semi-circular three-foot-high snow wall to guard himself against drifting ice, and seated on a block of snow he waits for his prey. As soon as the seal is harpooned, the hunter keeps the harpoon line in his left hand, and with his right hand he quickly removes the snow and the ice-cover and pulls the seal out. He kills it with a blow of his fist on its head. Sealing at Tuat is a strictly individual technique, involving no group arrangements for natural reasons, since blow-holes, which must be watched simultaneously, are not numerous.

Towards the end of March the white furry young seals are scented by the dogs under the snow near the breathing-holes and become an easy prey to the Eskimo. During the end of May the usually very successful hunts begin at the open breathing-holes (qulangirsijut). All able-bodied Eskimos participate—men, women, and half-grown children—the greatest number of large breathing-holes thus being covered. Those who lack harpoons are armed with sticks, and they simply push the seal back into the water until it comes up again at a hole watched by a harpooner. An individual variant of this technique (sivuliksiruq) exists. The hunter spends a considerable time lying on a willow mattress near a large hole, waiting for the seal to show up.

As soon as the seals come out through their breathing-holes to lie up on the wet ice to sleep, the auktuk sealing method is employed. "The hunter crawls over the ice but stops every time the seal he is stalking wakens and looks at him. As his prey is observing him, he has to roll about in the snow exactly like another wet seal that has just come up out of the water. The seal, which is very suspicious at first, at last believes it is another seal that, like itself, has come up to bask in the sun, and by and by takes no more notice of the hunter, who at last gets so near that he can jump up and harpoon it" (Rasmussen, p. 160). To avoid soaking his caribou fur clothing with water from the wet ice, the hunter uses two pieces of polar bear skin, one under his left ankle, the other under his elbow. This again is an individual technique.

There is no evidence that the Arviligjuarmiut ever used the long sliding harpoon employed with this particular form of spring sealing in several other eastern arctic areas. There is equally no evidence of any technique of summer open-water sealing from kayaks being traditionally employed by the Netsilingmiut, except for a legend associated with the estuary of Netsilik River, near Willersted Inlet, telling of seal hunts from kayaks being conducted at ancient times at that particular place.

Fishing

Traditionally, the Arviligjuarmiut employ several fishing techniques. Most important among these is the stone weir method (saputit), used for catching arctic char principally during the autumn uprun. In the Pelly Bay area twelve such stone weirs were used, ten on Simpson Peninsula and two near the western coast of the bay. Rasmussen has given a detailed description of a Netsilik stone weir (Rasmussen, p. 63–6), to which little can be added:

> A stone dam had been built in it (the little stream) blocking it completely. Out in the middle was the qagsge, a round weir of stones forming a separate enclosure, ten metres long . . . four metres wide . . . This qagsge had an uk'uaq: a gateway in the end facing the lake from which the river flowed. The trout that followed the stream and tried to get from the upper lake to the lower one had necessarily to pass through the uk'uaq into the qagsge, for both to the right and to the left of the uk'uak ran a stone wall about ten metres long right into the banks of the river (p. 63).

Some stone weirs, however (like the one at Agliarusiq Kuga, long. 89° 35′W., lat. 68° 30′N.), were used both during the spring downrun of the arctic char (around July 8 to 10) and during the autumn uprun (after August 15). At the saputit, fish were caught with the three-pronged leister. The two outward-turning prongs were preferably made of the relatively more elastic musk-ox horn and rarely of antler, and the middle spike and the two barbs were of polar-bear bone. Although building a saputit was a collective endeavour, repairing it after the spring break-up was undertaken by the hunter who arrived first at the locale. When the uprun started, the central part of the stone weir, where the spearing actually took place, was under observation by one or two watchers lying near the stream to observe the movements of the fish. These watchers were in constant communication, by signals, with the hunters standing near their tents. When sufficient fish entered the stone weir, the watchers withdrew, and everybody got ready. The attack took place simultaneously; they all entered the icy water at the same time following the signal of the 'superintendent of fisheries,' as he was called by Rasmussen (p. 64). Since the central parts (qagsge) of some stone weirs were not large enough to contain all the people, some of the women and younger boys stood on the ring of rocks while the best hunters were in the middle of the qagsge. During the actual spearing the air was filled with excitement and shouts, but there was no cooperation. Each hunter tried to catch as many fishes as he could, stringing them quickly on his qurqaut, a long bear bone needle on a thong with a bone toggle at the other end. The periods of spearing in the cold water lasted from a few minutes to over half an hour, depending on the number of fish that had entered the stone weir. In cases of great abundance many dozens of fish could be strung from a single attack. The use of stone fish-traps on the weirs gave those who were not efficient with the leister an opportunity to make a catch. In recent years Atuni, a blind Eskimo from Pelly Bay, was thus able to secure some fish for himself in his stone trap. Although most of the stone weirs were located well inland at the upper parts of the streams near the lakes where the arctic char used to spawn, some were built at the estuaries of the rivers near the sea-coast. Thus the saputit at Tinusaq (long. 90° 30′W., lat. 68° 44′N.) on the western side of Pelly Bay, being submerged during high-tide, was used only during low-tide. There is little evidence of fish rakes ever having been in use among the Arviligjuarmiut. When, however, a hunter did not have a leister, he still fished with an iron hook mounted on a long wooden stick. Near the Kellett River estuary there is a place called Niksikturvik, meaning the-spot-where-one-fishes-with-fish-rakes. In autumn, arctic char were particularly abundant at this spot, but since the water was not clear, and therefore the leister could not be used, the fish rake was preferred.

Organizationally, fishing at the saputit is very similar to caribou hunting at the artificial crossing places. When the attack is being prepared there is considerable coordination of activities between the observers, the signal giver, and the spearers. During the actual spearing, however, just as with the kayak hunts, every fisherman is individually after his prey, trying to make the most of his chances.

In summer, during the inland migrations, lake trout were sought. They were caught with the leister from the rocky lake shores or with the fishing harpoon (naulingniut) from the kayak or the shore. The fishing harpoon had a detachable barbed antler-horn point with a female socket, kept firmly attached to the wooden shaft by a thong. At the opposite end of the shaft an inflated bladder prevented the larger fishes from dragging the implement with them. Fishing with the naulingniut was a difficult art, necessitating continuous training. Certain localities were particularly suited for this pursuit. Such were Naulingniarvik (long. 89° 50′W., lat. 68° 33′N.), a prominent rock at the estuary of Kugardjuk River, around which at certain seasons schools of arctic char used to pass; and Naulingniarvikdjuaq (long. 89° 24′W., lat. 68° 22′N.), consisting of a small lake and a river flowing into Barrow Lake. At the estuary of the stream, large numbers of lake trout (isluardjuk) seem to congregate in spring and can be caught with the fishing harpoon.

An interesting group fishing technique, known to some Pelly Bay Eskimos and conducted in four localities on South King William Island and Spence Bay, consisted of two parallel rows of about fifteen rectangular holes, two feet long and one foot wide, cut in the spring ice near the shore. The holes were about three feet apart, and the two rows were separated by a distance of 50 to 80 feet. The arctic char moving in schools were preceded by many white-fish. The fishermen, each controlling one hole at the first row, were alerted at the sight of the first school of white-fish and were ready with their kakivaks to spear the arctic char. After the passage of the first wave of char, the spearers used to run to the second row of holes to complete their work. This method was called hiniktukhiurviq.

In spring and autumn the fish spear was used by individual fishermen, together with various fish decoys (aulardjut). Cracks made on the lake ice near the shore by the flowing waters of the numerous streams were good places in spring for fishing with decoys consisting usually of one or more pieces of white bone fastened on a line of plaited caribou sinew hanging at the end of a bone handle. In some of these handles was inserted a sharp needle of bear bone, employed to kill the fish behind the gills. Through the thin autumn ice of rivers and lakes, holes were cut with the antler-point ice-pick, and, with the help of fish decoys, large numbers of char were speared. This was the technique used at Kellett River during the important period of autumn fishing when most of the winter supply of char was secured.

Fishing with an iron hook (karjusiak), usually a bent nail, was rarely practised. A specimen secured at Pelly Bay shows an iron hook with no barb, fixed in a bone sinker with two little wings of bone. A small piece of white caribou skin was placed around the hook and used as bait.

In certain places, such as Karmartalik in the lower part of Murchison River, the 'sleeping hook' or mana was used. It consists of a straight pointed chip of caribou leg bone, in the middle of which a strong sinew thread is tied. The mana is wrapped in a piece of caribou meat and thrown into the river for the night. The following morning it is pulled out.

No fish-nets were traditionally used by the Arviligjuarmiut, nor snow igloos for fishing under thin ice, as among the Utkuhikjalingmiut (Rasmussen, p. 485).

Since tom cod was rarely seen in Pelly Bay, it did not constitute an important item in the subsistence economy of the Arviligjuarmiut.

Briefly, the three-pronged leister was the most important fishing implement of these Eskimos. Despite the large number of stone weirs scattered all over the country and the considerable catches that this group method often yielded, individual fishing through the thin autumn ice remained one of the most fruitful fishing techniques. Later we will see the importance this method had during the migration cycle of the Arviligjuarmiut.

Hunting Other Animals

MUSK-OXEN. Rasmussen already briefly noticed the importance of musk-ox hunting among the Arviligjuarmiut when he wrote: "[their] hunting year was evenly divided between caribou, musk-oxen, seals and trout" (Rasmussen, p. 22). In the previous note on musk-ox distribution it was mentioned that prior to the introduction of the rifle in the area the musk-ox was abundant in the regions lying west, south, and southwest of Pelly Bay. It is natural that the Pelly Bay Eskimos relied considerably on these large, meaty animals, Ross describes two musk-ox hunting techniques employed by the Netsilik in winter. When the tracks of the animals were spotted, the dogs were let loose, and the chase was on. Two hours later the dogs located a musk-ox and kept him at bay. The Eskimo tried to kill the large animal with bow and arrows: "It was easy to see that my companion's weapons were of little value in this warfare, or that the victory would not at least have been gained under many hours; as he continued to shoot without apparent effect, finding his opportunities for aim with much difficulty, and losing much time, afterwards, in recovering his arrows" (Ross, p. 350). On another occasion a musk-ox was found grazing on top of a hill and was pushed by an Eskimo and his dogs over the precipice (Ross, p. 353). A different method is related by Hall: "After a few minutes' watch of the movements of dog versus bull and bull versus dog, the old hunter . . . went forward to within twelve feet of a large bull, carrying a lance which had a line attached by which he could draw it back; but at his second throw the wounded and infuriated bull made a fearful forward plunge . . ." (Hall, p. 413). Amundsen summarizes the descriptions of an Eskimo: "The Eskimo are in the habit of goading the animals by shooting arrows at them, and when the animals become enraged they charge the hunters, who kill them with their spears" (Amundsen, vol. 1, p. 231). Qipingajuk, an old man from Pelly Bay, used to hunt musk-oxen with the heavy spear (iputuru) for bear hunting: first he would prod the snout of the animal, at which it would lift its head, bringing into view the throat for immediate spearing.

Musk-ox hunting was thus generally conducted in winter over certain particular areas by small groups of hunters with the help of dogs. Although bows and arrows were largely used, the heavy spear was also employed. There is no evidence of any specific patterns of collaboration among hunters during these expeditions.

POLAR BEAR. Despite the wide distribution of the polar bear in the eastern regions of the Netsilik country, there is no evidence of any extensive bear hunts being conducted in traditional times by the Pelly Bay Eskimos. Rasmussen attributed this to the small number of dogs owned by these Eskimos, a fact which limited the territory covered during hunting expeditions (Rasmussen, p. 183). Further, Rasmussen mentions dangerous bear pursuits by single individuals armed with the sealing harpoon only presumably in spring, when polar bears leave their hibernating dens.

Information collected in 1960 from elderly Pelly Bay Eskimos indicates that usually it was in spring that a polar bear was chased, and then by several hunters together. Kept at bay by the dogs, the large bear was surrounded by the hunters who watched for the opportune moment to strike, usually from the side (for a similar bear hunt, *see* Amundsen, vol. 11, p. 41). The sealing harpoon, armed with a special barbless point, was generally used, together with the short bear spear of antler horn with a sharp bear-bone point. The long and much heavier bear spear (iputuru) was used during the special winter hunts to drive the hibernating bears out of their dens into the snow.

BIRDS. Bird catching, as indicated by Rasmussen (p. 187), was an activity of secondary importance. Traditionally, ptarmigan were shot with the blunt arrow point. During their moulting period, the wild fowl were caught by the Eskimos barehanded or stoned. "They are also pursued on the lakes with the kayak, in which case they use a special bird harpoon . . . made of wood with a barbed point of horn" (*idem*). The bola was used only in the Itsuarturfik region. Bird darts and throwing boards were not known.

ANIMALS OF LESSER IMPORTANCE. The reader is referred to the list of traps and snares used to catch foxes, wolverines, hares, marmots, and birds (Rasmussen's, p. 187 ff.). Most widely used were the stone trap with a trapdoor at the entrance and the dead-fall trap with a large stone suddenly falling in on the game.

In the preceding section a general picture of Netsilik hunting and fishing techniques has been presented. This description is necessary for an understanding of the technological basis of certain group activities and leadership forms to be examined in the following pages.

BASIC SOCIO-ECONOMIC UNITS OF THE TRADITIONAL ARVILIGJUARMIUT

In this section a brief listing of the basic economic and kinship units of traditional Arviligjuarmiut society is presented. First, however, the position of the Pelly Bay Eskimos as a 'sub-tribal' group of the Netsilingmiut has to be made clear.

Concerning the etymology of the name Arviligjuag, Rasmussen writes: "Arviligjuag (the big one with the whales) is a term applied to the whole of Pelly Bay and has its origin in some mountain formations that, from a distance, have an outline like whales on the surface of the water. The natives themselves say that these formations have given rise to the name, as no whales ever come to these waters owing to the ice conditions" (Rasmussen, p. 22). Van de Velde translates Arviligjuag as "the great place where whales are to be found," referring to the numerous localities around Pelly Bay where whale bones are seen.

Noting that the Eskimo conception of population groups is based primarily upon locality, Weyer suggests that the designation 'tribe' is not exactly applicable to the social organization of the Eskimos. The sparsity of their population and their shifting habits in pursuit of game preclude even an approach toward a unified tribal system. Furthermore, the culture of the Eskimos is so uniform over wide areas that it offers no basis for well-defined tribal divisions (Weyer, p. 203). The Arviligjuarmiut have only a hazy notion of their being part of the larger Netsilik 'tribe.' The term Netsilingmiut (people of the seal) may have three meanings. The Aivilik Eskimos of Repulse Bay and the inland dwellers around Garry and Franklin lakes refer to the various groups who have land between Committee Bay and the western part of Adelaide Peninsula as Netsilingmiut. In this broad significance the term has been widely used in the ethnographic literature to include the various subgroups established in the area and generally localized by Rasmussen: the Arviligjuarmiut of Pelly Bay, the Netsilingmiut proper of Boothia

Isthmus, the Arverturmiut of Bellot Strait, the Qigirtarmiut of King William Island, the Kungmiut of Shepherd Bay, and the Ilivilermiut of Adelaide Peninsula. To that list the Iksuakturvirmiut of Lord Mayor Bay could be added. Thus, in its more restricted sense the term 'Netsilingmiut' may apply to the people of Netsilikilani or 'the country of the Netsilik Eskimos,' that vast area between Spence Bay to the North, Arrowsmith Bay to the South, and Western King William Island. With a still narrower meaning the same name may refer to the occasional inhabitants of Netsilik Lake and Netsilik River, south of Boothia Isthmus. When the Arviligjuarmiut speak of the Netsilik people, they usually refer to the inhabitants of Netsilikilani. Considering the shifting patterns of these Eskimos it should be kept in mind that the composition of the major subgroups enumerated above is always mixed. Through marriage and migration of families any one of these subgroups at any time will include individuals of other groups. Thus people born and raised in Iksuarturfik and presently established in Pelly Bay are reckoned as Iksuarturfik Eskimos. In the event, however, that their residence among the Arviligjuarmiut has been prolonged enough, or that they have married among that group, they slowly lose their status as foreigners and are considered as people of Pelly Bay, though originally from Iksuraturfik. In tracing back the origins of the people, the formative years spent in acquiring the hunting skill and learning about the particular characteristics of the area are considered as crucial identifications.

Considering the frequent migrations of individual and extended families in and out of Pelly Bay, the total population of this district must have been highly variable in traditional times. In the main sealing camp on the sea-ice of Pelly Bay in 1918, Kringhorn indicated that at least forty individuals lived together. Five years later Rasmussen counted forty-one people in Pelly Bay and about eighteen on West Simpson Peninsula, a total of fifty-nine. This was, however, during a period when rifles were in general use. It seems possible to conclude that the total population of Pelly Bay in traditional times must have been under or around sixty.

Before proceeding with the listing of the basic socio-economic units of the traditional Arviligjuarmiut, it may seem appropriate to underline again the objective character of these groupings. The concept of socio-economic units refers to certain overt aspects of collective or group activities with varying degrees of division of labour and organic collaboration. Here, by group activities one understands first, some of the all-important hunting and fishing practices of the Netsilik involving certain forms of patterned cooperation; second, the sharing of game returns, and third, commensality. The main question is: what are the functioning Netsilik groupings in the fields of food acquisition, distribution, and consumption?

Prior to describing the kinship composition of the extended or joint family and the large winter camp, it seems appropriate to first trace the extension of kinship recognition among the Netsilik. An outline of certain interpersonal relations within the extended family may give the erroneous impression that no relatives outside this unit are recognized. On the contrary, informants frequently mentioned numerous kinsmen, albeit distantly related or living in far-away settlements. In order to understand the position of the extended family in Netsilik society, it is necessary to indicate the widest possible circles of relatives recognized by informants. Such a circle of kinsmen the Netsilik designate as an ilagiit. As it will be shown below, the ilagiit is an ego-centred kindred. It is not a residential, ceremonial, political, or economic unit. Briefly, it is not a corporate group. It has important functions, however, in the field of marriage regulation and as the largest social sphere of personal security.

Distinguishing an extended kinship category in a generally simple bilateral society, marked by a constantly changing composition through migration and lacking precise inheritance and residence rules, is a difficult task. Several informants, however, have described their perception of what the circle of their relatives was. To this may be added evidence inferred from the analysis of residence patterns, marriage preferences, interactions exhibiting social proximity, and various kinship alignments in stress conditions. Thus it is possible to distinguish within traditional Netsilik society, appearing superficially as it does as a mere amalgamation of individual families, a certain number of overlapping larger circles of kinsmen.

The Extended Ilagiit

In order to analyse the extension of kinship recognition in traditional times, several elderly Eskimos were asked to list the names of most of the individuals they recognized as being their relatives (ila) at a certain period in their lives. Anirnilik named over forty people for the period of his marriage, 35 years ago, distributed as follows:

1—Anirnilik's adoptive father Atqartuk (being his father's brother's son)
  —Atqartuk's mother
  —Atqartuk's mother's mother
  —Atqartuk's mother's sister
  —Atqartuk's mother's first husband with his two brothers
  —Atqartuk's mother's second husband
  —Atqartuk's wife and her father
  —Atqartuk's brother's son
2—Anirnilik's father, Orpingalik
  —Anirnilik's father's father
  —Anirnilik's mother
  —Anirnilik's mother's two sisters
  —Anirnilik's mother's father and mother
  —Anirnilik's six brothers and one sister
3—Anirnilik's wife's brother
  —Anirnilik's wife's father's brother
4—a group of second cousins

Anirnilik thus recognizes several categories of relatives: first a group of individuals considered as relatives mainly through Anirnilik's link as adopted son of Atqartuk, although Atqartuk is also consanguineally related to Anirnilik (this group includes both of Atqartuk's parents and Atqartuk's wife's father); second, Anirnilik's family of orientation, including some secondary relatives such as father's father and mother's parents; third, two affinal relatives; fourth, a group of distant cousins.

Kringhorn, an elderly Eskimo, considered some other categories of related persons as being part of his present circle of relatives: his father's sister's husband's brother's son, the adoptive mother of his son's wife, the adoptive father of his daughter's husband, his wife's brother's sons.

Following Anirnilik's case, it is possible to note the great extension and the relatively large number of relatives listed. Tertiary and even more distant relatives, some affinals, and relatives of adoptive parents are considered as members of the circle of relatives of the informant. This large circle of relatives the Pelly Bay people call the ilagiit of an individual. It should be noted that consanguineally related people vastly outnumber the affinals. The proportion of the affinals in the later years of married life tends to increase. Relatives on both father's and mother's side are recognized as such.

The presence of some affinals in the ilagiit, composed otherwise of cognates, necessitates a brief comment. J. D. Freeman, in a recent analysis of the concept of the kindred, clearly indicates that in both anthropological and legal usage affines are never included in the category kindred (Freeman, p. 201). He rejects Nadel's definition of Nuba kindreds including affines (Nadel, p. 12) together with Geddes's analysis of Land Dayak society where collateral affines and cognates are grouped in one analytical concept (Geddes, p. 14). Further, Freeman refuses to consider the kano a paito of Tikopia, described by Firth as a kindred on the same grounds (Firth, 1936, p. 226). When ego-centred kindreds include affines, Freeman defines these as kindred-based groups. He distinguishes thus: "1) the kindred as a cognatic category, and 2) the kindred-based action groups formed from time to time for specific purposes, which ordinarily contain only a proportion of the total kindred, and also, on occasion, non-kindred in the shape of affines and friends" (Freeman, p. 203). Considering the Netsilik data, the ilagiit is certainly not an action group, as will be shown later. In order to avoid deviation from contemporary anthropological usage, one may consider the ilagiit as a kindred-based category, and because of the inclusion of affines, diverging somewhat from Rivers' classical definition of the kindred: "a bilateral group. . . consisting of persons related to one another, other than by marriage, through both father and mother" (Rivers, p. 16). For the sake of terminological simplicity however, the ilagiit will be referred to below as a kindred.

Goodenough states that "the most commonly used principle for restricting membership in ego-based kindreds is to specify a limiting degree of collateral relationship beyond which a person is not included" (Goodenough, 1961, p. 1345). When one considers the very few examples of kindred composition recorded and the general difficulty of reconstructing kinship recognitions for past decades, it is impossible to make any generalization regarding the collateral extension of Netsilik kindreds. The same difficulties explain the absence of data pertaining to the individual's situational selectivity adopted in recking kinsmen (Freeman, p. 208).

Not only does the ilagiit of an individual change with time, as people are born and die and new marriages take place, but no two ilagiits of two individuals, related or not, are the same (with the natural exception of unmarried siblings). Thus while the ilagiit of a father will tend to exclude most of his wife's relatives, his son's ilagiit includes both.

This variability of the ilagiit greatly limits its importance as a functioning social unit. First the ilagiit is not and cannot be a co-residential unit. The frequent out-group marriages and migrations of families into and out of Pelly Bay means that most of the Arviligjuarmiut have relatives all over the Netsilik country and even in the adjacent areas. Thus it is clearly impossible to conceive the ilagiit of an individual residing together.

Secondly, the ilagiit is not a political unit. This is explained easily by the nature of leadership among the Netsilik Eskimos. Although there are some elderly and able hunters who might exercise some diffuse forms of authority over a restricted group of kinsmen, there is no record of cases of such a leader exercising control over distant relatives who are still part of his ilagiit. Further, by the very fact that ilagiits are overlapping units, structurally they cannot become political entities. Let us suppose that 'A' and 'B' are leaders of their two ilagiits; the individual 'C' who might be a member of both ilagiits will find himself following simultaneously two leaders. The same applies to the definition of an individual's rights-obligations in relation to the other members of his ilagiit. As Steenhoven points out, in case of murder the relatives of the murdered person often think of taking blood-revenge, although this action has never materialized in the many instances of murder recorded by Steenhoven. Referring to some traditional tales from Rasmussen's collection, Steenhoven indicates that blood-revenge in the legends was generally taken by a single man, a near relative, the son, brother, or father of the victim (Steenhoven, p. 45, 48) rather than by more distant relatives as members of the victim's ilagiit. There is, however, some evidence of collective retaliatory raids that have taken place in the distant past between Arviligjuarmiut and Netsilingmiut (Steenhoven, p. 55, and Balikci field notes). These avenging parties apparently included most of the relatives of the victim and also some unrelated persons. If a person related to both antagonistic groups were present on the battlefield, he would be invited to step out. It is difficult from this sketchy example, which shows a high degree of settlement solidarity, to draw conclusions about the kinship relations of the members of such a party and the extension of the jural obligations uniting them. It is pointed out that a near relative of the victim would organize an avenging party, and if this organizer were a good hunter even some non-relatives, co-residents in the settlement, might join the nucleus of the group, made up of his relatives, in order to give him maximum protection. Parallel to this example is the assertion by Pelly Bay informants that in very ancient times the various regional groups did not mix, which would mean that these groupings tended towards endogamy and showed considerable social cohesion. Unfortunately, we know nothing on the subject besides this statement, but the more recent evidence points to the contrary. And even in ancient times there were people related to both feuding groups. This shows that only a certain number of one's relatives could follow him on a retaliatory raid, usually his chosen relatives. The extensive ilagiit of an individual could not act as a collectivity.

Thirdly, the ilagiit was not a ceremonial grouping. Not only were collective ceremonial activities rare among the Netsilingmiut, but the fact that the ilagiit was not a co-residential unit rendered its becoming a ceremonial grouping impossible.

Fourthly, the ilagiit was not an economic unit. Among the Netsilingmiut there were no goods important enough, such as umiaks, to warrant common ownership. And considering that some of an individual's more distant relatives did not reside with him they *de facto* could not form a collaborative unit. The ilagiit thus is not a corporate group. This becomes clear when Murdock's definition of the concept of corporateness is envisaged. Following Maine, Murdock defines a corporation "as an estate comprising rights over persons and various forms of real, movable, and incorporeal property in whose assets a number of individuals share in accordance with their respective statuses" (Murdock, 1960, p. 4).

What then are the essential aspects of the ilagiit? In order to understand the importance of extended kinship recognition in traditional Netsilik society, knowledge of certain hostile inter-personal relations, both in-group and out-group, is necessary. This is not the place for a discussion of Netsilik inter-personal suspicion and hostility (For a glimpse of these, the reader is referred to Rasmussen, p. 201 and ff., and Balikci, 1960, p. 20 ff.). Because of certain ecological, organizational, and religious factors, the Netsilik Eskimo lived in a state of suspicion and fear of non-related persons. This suspicion sometimes took the form of hostile action. Visiting a distant camp where no relatives were to be found was a dangerous affair. There was always the possibility that the traveller's wife might be stolen or that aggressive witchcraft might be practised in his presence. Rasmussen writes: "One would think that in these waste and desolate regions they would feel pleasure when they came across people who could be company for them; far from it. To this day it is customary when a sledge party approaches a settlement that it does not drive right up to the door. An informal arrival like that might give rise to fright and misunderstanding, which would quickly lead to hostilities. And the fact must never be lost sight of that human life was never at any time taken too seriously" (Rasmussen, p. 202). These dangers were minimized if relatives, even distant, were present in the alien camp. That is why when a foreign traveller was encountered, people immediately inquired who his relatives were, starting with his mother and father and proceeding outward in order to establish genealogical connections. If relatives were found, the traveller could count on collaboration and protection; they meant security for him.

The extensive ilagiit, or widest circle of relatives, may be thus considered as the largest social sphere of personal security. The ilagiit, however, had another important aspect. It was a category of people among whom mates were preferably sought. This endogamous tendency of the ilagiit results from the same factors making for the appearance of disorganizational trends in Netsilik society (Balikci, 1960, p. 20). Giving a daughter in marriage in a strange and distant camp could, and frequently did, result in maltreatment of the young wife. Living far away, she could not avail herself of her relatives' protection. It is clear that the new affinal ties between the two ilagiits were not valued. This trend differs from the exogamous tendency of the North Alaskan family groupings described by Spencer: "The family groupings to which the individual belonged were ideally exogamous. It is evident that a goal in marriage was to extend as far as possible the bonds of mutual aid and cooperation" (Spencer, p. 75).

The extended ilagiit is little else than a kindred (Murdock, 1949, p. 56). It is necessary to specify just what form of kindred the ilagiit is, in the light of some recent contributions to the typology of kindreds. Goodenough (1955, p. 72), Davenport (1959, p. 558), and others have clearly shown a fundamental difference between two distinct types of kindreds. First an ego-oriented category, or group of persons who have a relative in common. Ego recognizes a large category of relatives on both his father's and mother's sides and tends to view himself as the centre of this grouping. These are the 'kinfolk' or 'relatives' of our own society (Murdock, 1949, p. 56), which are ephemeral and overlapping categories, identical only for siblings, and as such they cannot function as corporate units. Murdock considers these kindreds as a major form of bilateral organization; they seem associated frequently with bilocal residence and exhibit a tendency toward exogamy comparable to that of lineages (*idem*). Different from this 'personal kindred' (Leach, 1950, p. 61, 62), which is laterally or radially organized (Goodenough, 1961, p. 1343), is the lineally organized ancestor-centred group lacking precise unilineal descent features. It has been also defined in 'Notes and Queries' (1929, p. 55) as a kindred: "a group of persons who acknowledge their descent, genealogically or by adoption, from one family, whether through their fathers or mothers." This type of kindred which has continuity through time, Goodenough has called a non-unilinear descent group (Goodenough, 1955, p. 72). There are several ways to limit membership in such groups: they are commonly named; they can own productive property and thus constitute corporate units.

It is clear that the extended ilagiit is a kindred of the first type. Collateral relatives and adoptive parents are included, and there is no mention of remote ancestors. The ilagiit thus is certainly not a descent group. The tendencies toward bilocality and exogamy, characteristic of Murdock's initial definition of the kindred, are not found with the ilagiit, since, as will be shown below, the Netsilingmiut markedly favour patrilocal residence and generally prefer to marry a member of the kindred. It should be noted further that the ego-centred kindred is not a group in the sociological sense of the word, but only a category of people in reference to an individual. As Freeman puts it: "The members of a kindred have no collective perception of unity, no persisting common objective and no leader or organization. A kindred, therefore, is not a group in the sociological sense of the term, but rather a category of cognates . . ." (Freeman, p. 202).

The Restricted Ilagiit

This grouping, being a narrower circle of more closely related kin, is considerably more important than the extended ilagiit. Kringhorn mentioned the following people as being part of his restricted ilagiit in the early 1920's: his adoptive father (in this case his paternal grandfather); his adoptive grandmother; his father and mother; four married brothers and their children; and his sister, married to an Aivilik Eskimo, who used to live in the Repulse Bay area with her husband and came to Pelly Bay occasionally.

Tungilik, a middle-aged Eskimo, reported that in the 1940's his restricted ilagiit consisted of his parents, his father's two married brothers, his sister with her husband, and the latter's brother.

At the Pelly Bay sealing camp in 1918 one of four restricted ilagiits camping together consisted of three married brothers with their wives and children; one of these brothers had a grown-up son who had a promised mate. This girl was staying there together with a small group of near relatives consisting of her adoptive mother (being her grandmother) with her two married sons.

More recently the elderly Niptajuk's restricted ilagiit comprised, besides his wife, his two married sons and their offspring, one of them married. To these can be added Niptajuk's brother with his wife and children and Niptajuk's second brother's son.

It is clear that this type of kin group is smaller than the extended ilagiit consisting only of its core. It usually comprises an elderly father with his married sons and their descendants. In the absence of the old father one finds an alignment of brothers. Only rarely a married sister is seen residing with the restricted ilagiit of her brothers, although she remains part of it. Sometimes this small group of brothers will be joined for variable periods by an uncle or a first cousin. In time, following the marriage of the brother's sons and the appearance of a third generation of offspring, a process of fission tends to operate, splitting the old alignment of brothers into several groupings, headed each by an older brother.

The essential characteristic of the restricted ilagiit is that it tends to be a residential unit. This, however, should be considered as a tendency only, though an important one, since usually the sisters of the small group of brothers forming the core of this grouping reside at their husbands' camps. In summer, during the inland migrations, the restricted ilagiit camps in isolation in the tundra. When the time comes for caribou hunting at the crossing places, the restricted ilagiit may be joined by one or two nuclear families or by another restricted ilagiit. In winter, several restricted ilagiits always camp together on the sea-ice.

Ideally the restricted ilagiit may be considered as a patrilocal joint or extended family. Despite the tendency towards patrilocality, the term 'extended family' is certainly not associated here with a unilineal principle, as there are no unilineal descent groups among the Eskimos. It stresses only the importance of the father-son relationship as an essential binding link. Following the death of the elderly father, as has been previously noted, an alignment of brothers emerges and the restricted ilagiit tends to form a joint family based upon the horizontal bonds between brothers. It should be noted, however, that the rule of patrilocality, although culturally recognized, often knew exceptions following situational and idiosyncratic factors. Furthermore, the alignment of brothers constituting the nucleus of the restricted ilagiit was often joined by more distantly related individuals, usually affinals or tertiary relatives. These individuals lacked the primary relatives (a living father and one or more brothers) necessary to form part of an extended family. Sometimes even one of the brothers might choose to spend some time in a distant camp.

The co-residential members of a restricted ilagiit do not form a single household but live in a cluster of snowhouses or tents. However, one of these dwellings is larger than the others and is occupied by the elderly father and his eldest married son. When the younger son gets married, the elder son moves out into a separate igloo and his younger brother takes his place in the father's dwelling. Thus when Niptajuk's younger son, Angutingurniq, married, his elder brother, Inuksak, with his wife had to build a separate igloo. Usuligardjuk's promised girl was living on King William Island before he went to fetch her. When he brought her home, he moved into his father's dwelling, and Kutsiutiko, his younger brother, established himself in a separate igloo in the same camp.

Can one consider the restricted ilagiit as a political unit? This naturally depends on the more or less inclusive character of the criteria used for defining the term 'political.' If territorial administration, together with formal governmental superstructure, is made the basis of that category of social facts labelled as political organization, then as Steenhoven puts it: "It is a well known fact that Eskimo society has no political organization" (Steenhoven, p. 14). But if, an all inclusive definition is accepted, then certain forms of leadership and inter-group relations may be conveniently described under that heading. As Hoebel puts it: "The only kind of society that could be said to be without political organization would be one consisting of a *single* bilateral extended family within which there were no organized subdivisions" and further: "Political organization comes into being wherever societies are segmented on the basis of kinship, economics, religion, sex, fraternities, or community. Where there are subgroups that are discrete entities within the social entirety, there is political organization—a system of regulation of relations between groups or members of different groups within the society at large" (Hoebel, p. 376). Let us note again that we have no intention of discussing theoretically the presence or absence of political organization among the Netsilik Eskimos. Here it is just a term used for grouping together certain organizational aspects of the restricted ilagiit.

In the previous section describing the organizational aspects of hunting, one notes the existence of specific supervisors of the different types of hunts. Presently it will be shown that usually these organizational supervisors and coordinators were the headmen of restricted ilagiits. The Netsilik Eskimos use two names for a headman, an able elderly hunter enjoying considerable prestige and some measure of diffuse authority over his restricted ilagiit; these words are inhumataq (he who thinks) and inuadluk (great man). Kringhorn described as follows the role of Ubluriasuksuk, his father:

> He was the headman of my ilagiit, he was the oldest among us and a good hunter, although not an excellent one. Abluhirjuaq was a better bowman and kayaker, both however were very good aglu sealers. Ubluriasuksuk was headman for hunting, telling people where to go hunting. My people also used to get together and discuss which way to go. Ubluriasuksuk was a good hunter because he used to stay out until he killed something. He will always bring back something. When hunting bear with Uhuktuk (a younger brother), Ubluriasuksuk would tell him: you run and shoot the bear, or: run and wait for me, I will shoot the bear. He would always give instructions to Uhuktuk. The same thing took place when they were hunting caribou.

This was at a period when Audladjut, father of Ubluriasuksuk, was too old to continue his active leadership. Previously, in the year 1918, in the sea-ice camp where four distinct restricted ilagiits were camping together, Audladjut was the head of the sealing operations. Kringhorn describes the situation as follows: "Of our ilagiit Audladjut was headman, being the oldest. All the hunters of the four ilagiits will ask every morning of Audladjut where to go hunting. If they didn't ask, he will ask them."

Of the group of relatives hunting together at the caribou crossing places Tigluarvik (Krusenstern Lake) and Tasiq in 1918, Orpingalik was the headman of the hunts, being the oldest and best hunter. This is according to Anirnilik, who witnessed the hunt when 15 years old.

More recently Tungilik, a member of a restricted ilagiit whose core consisted of three brothers—Papik (Tungilik's father), Ulik, and Attak—affirmed that Ulik, being the best hunter, was headman of the group. When time for moving the camp came, however, people listened to Papik. These three brothers generally camped together.

Steenhoven has recorded the testimony of 29-year-old Akkrak, married, about his relations with his stepfather Ulik, the inhumataq of the restricted ilagiit: "For hunting I usually follow Ulik . . . . I request his thoughts with regard to far travels; for the rest I do as I please, though sometimes I consult him also for smaller affairs. If Ulik would disapprove of a far travel planned by me, I won't go. Such things have happened. Although I sometimes feel a certain fear, I will go if Ulik tells me so . . . . If I have not much dog food and he tells me to go deer hunting, even if I feel that same fear, I will go" (Steenhoven, p. 24).

It is possible to conclude that, despite the absence of formal chieftainship, certain Netsilik headmen achieved considerable prestige and authority over the members of their restricted ilagiits. This authority, in the typical Eskimo manner, though not expressed formally in explicit orders, took rather the form of advice and invitations. Often important things were discussed collectively among the elders, and "the young followed." Hunting expeditions, far travels, and group migrations were submitted to the 'jurisdiction' of the inhumataq. It should be noted that superior hunting skills and advanced age, together with a good knowledge of the country, were the necessary qualities of the traditional Netsilik headman. His diffuse authority was generally co-extensive with his restricted ilagiit.

Let us briefly examine now the problem of blood revenge, as seen by the members of the restricted ilagiit. Following a detailed description of several historic cases of murder among the Netsilik, Steenhoven concludes: "Blood revenge, which is suggested in the literature to be a sacred duty and common practice among the Netsilingmiut, was remarkably not known to have been realized after any of the eight historic cases of plain murder recorded; these cases went back as far as 1900. There are, however, strong indications that the practice has once been common" (Steenhoven, p. 61). One should note immediately that Steenhoven limited himself to the cases of *actual* murder and *actual* blood revenge. During any detailed survey of Netsilik shamanistic practices I recorded case after case of murders committed with the help of supernatural agents. The actual murders described by

Steenhoven appear as only a fraction of the large number of killings that took place among the traditional Netsilik. In some instances one finds cases of revenge committed by a near relative. For example, here is the case of Kutirjuak, a woman who had two successive husbands. Niharaitsuk was her second husband. Armadluk was the mother of her first husband, who hanged himself out of anger at his wife. That is why Armadluk tried to take revenge for her son. Armadluk killed Kutirjuak with the help of her tunraq (protective spirit) just after the young woman gave birth to a baby. Kutirjuak was alone in her igloo. By the time people went to see her, she was already dead.

The important point here is that apart from the question of whether blood revenge actually materializes or not, the thought of revenge among the near relatives appears (Steenhoven, p. 48). This indicates the solidarity of the restricted ilagiit when one of its members has suffered aggression.

It is possible to conclude that, seen from outside, the restricted ilagiits appear as discrete kinship units. Informants readily recognize them as such. Kringhorn, describing the people living on the sea-ice in 1918, easily grouped them into four distinct ilagiits. When one considers that superordinate-subordinate relations exist within the restricted ilagiits, as exemplified by the diffuse authority of the inhumataq, and that in cases of aggression from outside a certain ilagiit solidarity appears, one notes that the restricted ilagiits may be ideally taken as distinct socio-political groupings.

The task of describing the economic aspects of the restricted ilagiit must now be faced. The basic dichotomy in the annual cycle of the Netsilik, which is characterized by a summer inland adaptation and a winter sealing period on the flat ice, produces seasonal changes in the economic relations within the restricted ilagiit. In the next paragraphs a brief sketch of some summer sharing practices will be presented.

Rasmussen has stressed the importance of present needs in food sharing in general and in caribou meat distribution in particular.

> In this (caribou) hunting the shares are more or less common to all Eskimos. Besides the skin, the hunter's own share is the head, neck and either the whole of the forequarter or a part of it, whereas the fat hindquarter is generally shared by the others. If two hunters have been after a caribou, the one who killed it gets the forequarters, the other the hindquarters . . . Otherwise the sharing of the meat is to some extent dependent upon whether there is a general shortage or not . . . If there is sufficient meat the rules are not always observed to the letter; but it is always considered to be good form for the one who brings down a caribou to give his fellow villagers a feast and not cache all the meat for himself (Rasmussen, p. 173).

The absence of extensive and rigid sharing rules for caribou meat is expressly stated by several informants. Traditionally, at the crossing places where some distantly related or unrelated families camped with the restricted ilagiit, caribou meat was rarely shared. If an unfortunate hunter failed to kill any caribou and was hungry for meat, he was given a piece of the forequarters and half the hindquarters of an animal just caught by a near-relative—a brother, an uncle, a cousin. This gift-giving often took place at the site of the kill, the crossing place itself, immediately after the close of the hunt. When two bowmen were stalking caribou together, the lucky hunter would always give part of the hindquarters to the other. When, at the end of the caribou hunting season, time for moving camp came, the unsuccessful hunters again received portions of caribou meat from their relatives to take with them to the new camping site. Later on, in the sea-ice camp "If caribou meat or frozen trout is brought home (from a cache), it would cause a most painful stir if all were not gathered to a festive meal—by invitation of course" (Rasmussen, p. 147). Thus caribou meat sharing was occasionally continued on an extended basis in winter, making of the whole sealing camp a commensal unit for a brief period.

The essential aspects of caribou meat summer sharing appear to be the lack of precise sharing rules, the preference of near kinsmen, and the continuation of sharing depending on need long after the actual kill has taken place.

There were similarly no precise traditional rules for the sharing of fish caught in summer or autumn. Members of a restricted ilagiit, camping together during the seasons of intense fishing, generally made common fish caches. This was the case with fathers and young, even married sons. When the sons became middle-aged men with grown-up descendants of their own, there was a tendency to build individual caches. If, however, later in the season one of the brothers lacked fish, he was always supplied by his near-relatives.

Considering that traditionally no seals were caught in summer, a survey of seal meat-sharing patterns pertains to the organization of the winter camps.

In summer and to a lesser extent in winter, the restricted ilagiit tended to function as a commensal unit. The younger hunters used to bring their catch to the inhumataq's dwelling. From that moment it was the headman's wife who became the distributor of the food. She gave the shares to the members of the restricted ilagiit and made the food gifts to the more distant relatives. Thus the oldest woman of the small circle of kinsmen was the real controller or 'owner' of the food. If at any time of the day an individual desired a piece of meat, he was supposed first to address himself to the old woman. Kringhorn described this practice as follows: "When Audladjut's sons came back from the hunt they went straight to their father's tent and brought the meat and skins to their mother. Their mother will cut the meat and give them some." The young couples kept only small amounts of food in their igloos for consumption early in the morning or late at night. Further, restricted ilagiit members used to have common meals, men and women eating separately. A single piece of meat circulated from hand to hand, the group forming a circle (*see also* Rasmussen, p. 51, and illustration, p. 329). This applied equally to fish, caribou, and seal meat. In this function as commensal unit, as in others, the restricted ilagiit should be considered within the framework of its own developmental cycle. This grouping functions as a commensal unit when it is essentially composed of a still active father-headman surrounded by unmarried or married sons with small children. The Netsilik commensal unit appears as somewhat larger than the Northern Ojibwa corresponding grouping from a later period, as described by Dunning (1959, p. 63). In a later phase, when this father-sons relationship is superseded by an alignment of brothers with grown-up children, a process of fission operates, tending to break the old commensal unit into two or more new ones. This process is completed with the death of the old mother, the 'food boss.'

Borrowing was another factor which strengthened the economic relations within the restricted ilagiit. During the traditional period, borrowing of certain essential things from a near-relative was an important act. It is a well-known fact that in the general Netsilik area, and particularly around Pelly Bay, driftwood was extremely scarce. Wooden sledges were thus a rarity, and the Netsilik had to use many substitutes (Rasmussen p. 25, 144). Because of the difficulty of procuring dog food, the Netsilik kept very few dogs (about one and a half for each hunter) and had to pull the sledges themselves. When cached meat had to be brought in or when a distant winter journey was in prospect, a hunter could borrow the sledge and the dogs of the other members of his ilagiit. No payment followed such temporary borrowings, but the sledge had to be returned in good order and with a new shoeing. Borrowing thus allowed the members of a restricted ilagiit to pool their transportation facilities in order to allow an individual greater mobility when such was required.

The fact that the restricted ilagiits camped in isolation inland during the summer migrations means that all summer collaborative hunting practices took place between closely related persons. The ilagiit headman was the rudimentary coordinator of the hunting activities described previously. Thus in summer the restricted ilagiit constituted the collaborative unit in the field of hunting.

It is possible thus to consider the restricted ilagiit as an important economic unit, especially in summertime. It will be shown later that in the large winter camp the restricted ilagiit had to abandon some aspects of its economic autonomy and enter into economic collaboration with other restricted ilagiits. This however only slightly diminishes its character as a basic socio-economic unit.

The restricted ilagiit was not a ceremonial unit. All three forms of shamanism among the Netsilik involved essentially a curer-patient type of relationship. Only rarely did the shaman perform on behalf of groups of people. Such cases occurred, however, when certain forces menaced the camp as a whole. One summer, during a gale, thunder frightened the relatives of the shaman Iksivalitaq. They begged him to hold a protective séance. After several repeated trances he succeeded in driving the thunder away. Even in this case it is difficult to characterize this camp as a ceremonial unit, considering the passive attitude of the assembly. No drum dances and no communal singing took place in summer.

In contrast with marriage practices in other Eskimo areas, the Netsilik preferred to marry first cousins belonging to the restricted ilagiit. This is not the place for a detailed discussion of Netsilik marriage. It is possible to state, however, that marrying quite near-relatives, particularly first cousins—both parallel and cross—was a recognized norm. Yet, for various and highly variable situational reasons, in traditional times only a small percentage of marriages were among cousins. It is only recently that the pattern developed fully and became statistically predominant. The traditional norm was thus expressed by Arnakajak, an old Netsilik widow presently living at Pelly Bay: "In the old time if the mother of a boy had a choice between three girls to be promised for marriage to her son: a first cousin, a girl more distantly related, and a non-related girl, she will certainly prefer the cousin. Yes, in the old time people liked very much to marry cousins. My husband Papik was a cousin of mine, our fathers were brothers." Asked why the people preferred to marry relatives, Arnakajak replied: "People preferred to marry within the ilagiit because they trusted more their ila (relatives). If the girl marries a non-ila, they may take her away and may treat her badly. But with the ila the girl stays with her people and they can see her." The factors operating behind such a pattern were much more complex than the testimony of our informant led us to believe. These will be described and analysed in a separate paper. One notes, however, that because marriages between first cousins were statistically a minority and because the process of fission operating within the restricted ilagiit was under intense ecologic pressure, this grouping never became really an endogamous unit.

Thus, the restricted ilagiit tends to appear as a co-residential, economic, and kinship unit. Its members are kept together by numerous social bonds. Marrying related persons increases the kinship cohesion of the restricted ilagiit which is the social sphere of maximum security for the individual. No aggressive joking is allowed between ilagiit members. "The ilagiit," said Kringhorn "are the related people who may go away but come back and then share food, help each other and stay together."

The Winter Camp on the Sea-Ice

Previously it could be seen that for successful sealing on the sea-ice a large number of breathing holes had to be controlled simultaneously by a group of harpooners. This necessity explains the large winter gatherings in the sealing camps.

The restricted ilagiits in summer formerly camped separately during the hunts inland. After the intensive fishing period in autumn and the preparation of new caribou fur clothing, one or two sealing camps were formed on the flat ice. The good sealing areas were located west of Kugardjuk, in the middle of Pelly Bay (lat. 68° 49'N.) or south of Harrison Islands (lat. 69° N.). The first ilagiit to arrive there set up camp; the others quickly learned about it and joined soon after. In the 1918 camp four restricted ilagiits camped together, totalling over twenty hunters. The preceding winter the camp comprised five distinct restricted ilagiits, recognised as such by our informants. Thus the winter camp was not a kinship unit, despite the fact that people from one ilagiit might themselves recognize some kinship bonds with members of the adjoining restricted ilagiits.

The winter camp, however, was a very important economic unit in two spheres of activity: communal hunting and seal-meat sharing. Concerning the first it is unnecessary to add anything to what has been said previously in the section on seal-hunting techniques. The headman of one of the restricted ilagiits acted as sealing coordinator. In the 1918 camp, Audladjut, the eldest and best sealer of one of the ilagiits, assumed this role. "All the hunters of the four ilagiits will ask Audladjut every morning where to go, and if they didn't ask him, he will ask them." The second factor, community sharing, may be considered as a social feature of considerable importance. Seal meat and blubber were shared according to precise and highly complex rules, described in detail by Van de Velde (1956). The seal was cut into fourteen main parts, each bearing a particular name. A hunter had several sharing partners, named after a part of the seal. Sharing partners used to call each other after the corresponding seal cut. Thus two hunters, 'A' and 'B,' will call themselves reciprocally 'Ukpatiga: my buttocks.' Whenever 'A' killed a seal he was obliged to give the buttocks to 'B,' and vice versa.

These sharing partnerships were already established for the small boys by their mothers. Some were distant relatives; most were not related. It was important for the children to be of similar age. Usually only a small number of a hunter's sharing partners were present at the sealing camp. Then he was obliged to choose other partners for the duration of the winter. This he would do himself, or if his mother was alive, she would take charge of appointing her son's partners, in her capacity of 'food boss.' She would proceed in the following manner: when her son would bring home his first kill of the season, she would cut the seal in the traditional manner and, putting aside the six most important parts, would indicate to whom they should go. The receivers of these would be the sharing partners of her son for the season. When a partner died, usually his brother replaced him in the sharing system. With each piece of seal meat, a portion of blubber was distributed. If a hunter was temporarily absent and his wife remained in the camp, she would receive her husband's share. The same applied for the man who had remained in camp and had not participated in the hunt. If a hunter were not the sharing partner of a particular lucky killer, he would still be entitled to a portion of blubber.

The actual sharing proceeds as follows: as soon as the seal is brought into the igloo, the woman controlling the food distribution starts butchering it according to the traditional rules. Meanwhile the children from the camp start entering. They are the first to get their shares: sanirairniq, the meat from the side of the seal. The gifts to the children are called 'nutaqab aitjuga.' These thin slices are first warmed up on the lamp fire and placed directly in the mouth of the child. Since the child is not allowed to eat anything without the permission of the 'food boss' of his restricted ilagiit, he quickly runs home. Thus room is made in the igloo for the wives of the sharing partners. Each of these wives carries a sealskin bag with two straps called 'niqaitut,' and from that comes niqaiturasuaktut, the term designating this sharing system. The wife of the sharing partner waits in the porch of the igloo, just pushing her seal bag on the ice floor through the entrance. The woman in charge of the distribution asks her name and places her part in the bag. After the sharing has been completed, the harpooner of the seal gets the rest. It is not much: the skin; the contents of the thorax; what is left of the contents of the abdominal cavity; the blubber of the back: no meat at all!

Whenever a hunter would bring a sledgeload of caribou meat or fish from his caches, gifts were made to all the families of the winter camp. Previously it was mentioned that common meals in the ceremonial igloo often took place on these occasions. This was upon invitation, and such a feast was always accompanied by ceremonial activities. Usually, however, when fish was brought into the winter camp any family was entitled to a piece five to six inches long. Caribou meat gifts consisted of a slice of caribou fat about ten inches long and two inches wide together with a small piece of meat. Close relatives outside the commensal unit received considerably larger food gifts. It becomes clear that the winter camp characterized by group sealing, rigorous seal-meat sharing, and occasional commensality may be considered as a large socio-economic unit.

To a certain degree the winter camp constituted a ceremonial unit, too. The great communal igloo, the qagsge, was the ceremonial centre of the winter camp. It was a large dome of snow blocks supported by three or four individual igloos with large openings on the inside. These igloos were usually occupied by close relatives or by wife-exchange partners, usually song-partners as well. On numerous festive occasions the people of the camp assembled there, singing and dancing. Individual songs of many kinds and song duets were performed. The drummer and dancer stood in the middle, slowly beating the drum, crying loudly and moving along a narrow circle. His wife or a near female relative of his sang the song, accompanied by a group of older women repeating the refrain. Everybody else formed a circle around the individual dancer. At the end of the performance, the dancer handed the drum to another man, usually his song-partner. Thus during one gathering the drum changed hands several times. On certain occasions the shaman performed a séance on behalf and in front of the whole community. In the not-too-distant past, during one stormy night, dangerous cracks in the sea-ice, heard all along the camp, terrified the people. Quickly everybody gathered in the qagsge, and the shaman, falling into a trance, observed a small caribou running across the dome of the large snow-house. This vision was attributed to the infraction of a caribou meat taboo. Long confessions in public by everybody present were required until the guilty person was discovered. It is thus easy to consider the winter camp as a ceremonial unit.

Before closing this section on the winter camp, it seems legitimate to ask the following question: Why is sealing in the winter camp accompanied by rigorous and precise sharing rules, and why are no such rules to be found for the summer game, caribou and fish? Weyer already perceived the problem, without attempting an answer: "In caribou hunting the property would seem to approach less closely to communalism than in the case of the sea mammals" (Weyer, p. 182). At first glance ecological factors seem to account for the difference: winter is the difficult, dreaded season when starvation following unsuccessful hunting is most feared. At that period rigorous food distribution seems most necessary to give maximum survival chances to the whole camp, including the unsuccessful hunter. This explanation seems to neglect the fact that summer hunting had equally its ups and downs, and in the past numerous were the seasons when enough caribou furs for clothing were not secured and seal skins had to be used for this end. Rasmussen describes a hungry summer camp at Amitsoq, King William Island: "Food had been short during the summer" (Rasmussen, p. 61). Further, Pelly Bay was (and still is) an excellent sealing area, and no winter starvations are remembered there; caribou, however, were never abundant in that region, and in summer the Arviligjuarmiut had to rely mainly on fish.

Examining the problem closely, one discovers that the most striking organizational difference between winter and summer camps was the fact that the first comprised several distinct kinship units, whereas the second usually consisted of only one kinship unit. It is evident that among consanguineally related people enjoying the confidence of each other and generally forming one commensal unit, formal sharing rules were not a necessity, since close relatives always helped each other. In the winter camp where one's neighbours were non-relatives and often potential enemies, rigorous and formal sharing rules were a high necessity. It was only through the common acceptance of these rules that equal distribution of the food could be assured. The precise seal-meat sharing rules appear thus as a system for regulating economic relations between non-relatives. They seem a means for adjusting man not only to the environment but to society.

The Family

Here will be given a brief summary of the economic relations, already described, between the individual family, the restricted ilagiit, and the winter camp. The individual family is composed of the husband, the wife, and the unmarried offspring. Polygynous and polyandrous matings do not change the economic relations within and without the individual family. All such relations should be considered with reference to the developmental cycle of the social groups under analysis.

The individual family is the locus of ownership of all material possessions. Strictly speaking, goods were owned individually; the hunter had his own harpoon, knife, kayak. His wife was the proprietor of her blubber lamp and stone pot, women's knife, and hide-working tools. Considering the rigorous complementarity of the sexual division of labour within the individual family, resulting in an endless exchange of services between husband and wife, both of them benefited from the work performed with the help of the other mate's tools. The individual family remains the social unit within which individual ownership of production goods occurs.

In the winter sealing camp, the hunter labours as a member both of a large hunting team and of a food-sharing group, and this independently of the hunter's age and the number of his offspring. When he kills a seal, the meat and blubber are shared all over the winter camp. We noticed previously that in winter the restricted ilagiit did not act as an organized unit in the fields of food acquisition and distribution. The winter camp was thus integrated on the basis of a multitude of individual families whose heads hunted together and shared food. The economic prerogatives of the winter camp transcended those of the restricted ilagiit. This is not always the case where food consumption is concerned. Two factors seem to determine the size and composition of the commensal unit: the developmental cycle of the domestic group and the abundance or scarcity of food. First, when the son is not long married and has only small children, his family of procreation and his family of orientation, including his mother and father, together with his unmarried siblings, tend to form a single commensal unit. When the children grow bigger, the individual family of the son tends to form a separate commensal unit. Secondly, when food is abundant, there is a tendency for the commensal unit to enlarge and include several closely related individual members of the restricted ilagiit. It is understood that these commensal units are bisectional: men and women eat separately. Thus in the winter camp the individual family and the restricted ilagiit (or sections of it) can both be considered as commensal units.

With spring sealing on the wet ice the large winter camp breaks up, and the restricted ilagiits move nearer the shores. This automatically terminates the niqaiturasuaktut, seal-meat sharing. The summer part of the annual migration cycle begins. It remains the same throughout the summer and autumn. In the field of food acquisition, a mixture of individual and group hunting practices is found. Food sharing is common, but it is not conducted according to precise rules. When the food supply warrants it, most meals are taken by all people together. During the summer season the restricted ilagiit may be considered as the important economic unit.

There are some cases, however, when in all seasons certain individual families pull away and either try or are obliged to remain economically self-sufficient. First there are the murderers who move to a distant area from fear of revenge. We hear: "Self-imposed temporary exile to Fort Ross was therefore frequently resorted to" (Steenhoven, p. 48). More recently Rasmussen has described the outlaw Iksivalitaq as hiding with his family in the mountains south of Pelly Bay (Rasmussen, p. 18). Secondly there is the case of the stingy man who skimps in sharing. He gives little, and naturally he receives little. Although he remains in the circuit of traditional seal-meat sharing, on any other occasion he will try to withdraw from the obligation to present others with gifts of food. Naturally, only very able hunters can place themselves in this position. It is even said that in the presence of favourable hunting or fishing opportunities the very good hunter may choose to camp alone for certain periods and take a maximal advantage of a particular game concentration.

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In the preceding sections an attempt was made to correlate certain elements of hunting technology, economic organization, and kinship relations among the Netsilik Eskimos, with particular reference to the Arviligjuarmiut. This was done in an attempt to describe the basic socio-economic units of these people and the underlying factors explaining their main characteristics. By the very nature of my aim, I had to adopt an approach centred on the description of social wholes and various collaborative forms. This partly explains the insufficient treatment accorded the various functions of the nuclear family. My approach contains a reaction to the writings of the numerous ethnographers who have considered the nuclear family as the basic socio-economic unit of the Eskimos (*see* particularly Jenness, p. 83, and Spencer, p. 64; and the interesting discussion on anomie among the Ammassalik by C. C. Hughes, 1958, with a criticism of J. Mirsky's treatment of the subject (Mirsky, 1937)). It should be stated, however, that the preceding sections give only a one-sided image of social interactions and social cohesion among the Netsilik. In traditional Netsilik society, important disorganizational forces making for disequilibrium were in constant operation. First among these was the extremely high rate of female infanticide (Rasmussen, p. 141), resulting in a marked inequality between the numbers of men and women: 150 males to 109 females for the Netsilik tribe in 1923 (Rasmussen, p. 84). This encouraged polyandry, usually of a temporary nature, and obliged numerous males to remain unmarried for prolonged periods. Both results produced violent interpersonal tensions and explosive social situations. There is abundant evidence for numerous cases of wife stealing, murder for obtaining wives, and rape. These data will be analysed later in a general study on the circulation of women among the Netsilik Eskimos.

Witchcraft is another sphere in which interpersonal hostilities are easily visible. Data indicate that though protective magic was practised only by the three distinct classes of Netsilik shamans, aggressive witchcraft (ilihiitsut) could be indulged in by any Eskimo, man or woman (*see* Balikci, 1961*a*, p. 23). The wealth of the data collected in this field is such as to merit separate treatment.

These disorganizational forces provide the background for the numerous cases of egoistic suicide described in another paper (Balikci, 1961*a*). The essential thing to remember is that parallel to the socio-economic units described, which give a cohesive picture of Netsilik society, important disruptive factors at a different level were in constant operation.

The preceding pages contained a systematic description of the basic socio-economic units of Netsilik society following a listing of the local hunting and fishing techniques. All these elements were treated separately as isolated traits, although certain relations between them, such as the ecological and technological basis of the winter camps, were often mentioned. It seems necessary now to integrate some of these traits empirically to give a rounded picture of Netsilik socio-economic life within the framework of the annual cycle. This is done in the following section.

THE TRADITIONAL ANNUAL CYCLE

In the following paragraphs will be presented a brief description of the last Arviligjuarmiut annual cycle involving caribou hunting from kayaks. The year is 1918, and the informant is Kringhorn, who was then about 12 years old (*see* map 3). This date was chosen because of the opening in 1919 of the Hudson's Bay Company store at Repulse Bay. In the following years this post assured the Arviligjuarmiut of a regular supply of guns and ammunition.

The people spent the winter sealing at the breathing holes with caribou antler harpoons. The camp was located about twelve miles west of the estuary of Kugardjuk River, on the sea-ice in the middle of Pelly Bay (long. 90°10′W., lat. 68°32′N.). Four restricted ilagiits were camping together. These were: 1) Audladjut with his wife Kiaiut and their grown-up sons Ablusirjuak, Uquqtuq, Ubluriasuksuk, Arnaktaq, and Qimitsiaq (Kringhorn is a son of Ubluriasuksuk), Audladjut acting as headman of the group and his wife as 'food boss'; 2) Kraksiuvik with his second wife, Iahataitsu, and their son Taliriktuk and two brothers of Kraksiuvik, Qimirluk and

Ungirk, both with their wives and children. Taliriktuk had a promised girl, Tabvataidjuk, who was staying there, together with her grandmother Akuarjuq, who had adopted her, and Akuarjuq's two married sons, Uaniuk and Suviisaq; 3) Sugusirtuq and his wife Maulik, their son Qingurjariktuq with his wife, Hiutinuaq, and numerous offspring: 4) Inaksaq with his wife, Kangunak, and their five sons, Tutiaq, Tangajurdjuk, Iliuik, Kajurjuk, Itsuutak, and their daughter, Arnapsalaq.

Life in the camp was peaceful, and there were no fights that winter. The first and second ilagiits were particularly friendly, and sometimes both ilagiits used to eat together. Qimirluk was the son-in-law of Audladjut, and both ilagiits would share a meal, men and women eating separately. The other two ilagiits used to keep apart. Audladjut used to act as organizer of the hunt for the whole camp.

The area was very good for sealing with favourable flat ice quite near Kellett River (Kuuq) from where cached fish was transported. Sugusirtuq lived in the qagsge.

They remained in the sealing camp until the end of May when it was time for the tents to be put up. Then the ilagiits separated. Kraksiuvik went north to Maniituardjuk (North of Helen Island) to hunt seals, employing the spring hunting techniques. Sugusirtuq first moved to the western side of Pelly Bay and from there to Ariak (Simpson Lake). Inaksaq moved in a direction slightly south of Sugusirtuq. Qimirluk separated from his ilagiit and joined his cousin and father-in-law, Audladjut; they moved to the spring sealing grounds near the little island Qimikvik, in front of the estuary of Kugardjuk River. Two sons of Audladjut, Ablusirjuak and Uququq, joined Kraksiuvik. Below is an enumeration of the dogs and wooden sleds owned by Audladjut's ilagiit:

Audladjut: one dog, no sled
Ablusirjuak: two dogs, no sled
Ubluriasuksuk: two dogs, no sled
Uquqtuq: one dog, no sled
Arnaktaq: two dogs, no sled
Qimitsiaq: one dog, wooden sled received from his father who got it while trading with the Ilivilirmiut from Adelaide Peninsula.

There were thus nine dogs for six hunters, or 1.5 dogs per hunter, and only one wooden sled.

Spring sealing around Qimikvik Island was successful, and Audladjut's group made nine caches of seal oil. When time came for the salmon downrun during the first two weeks of July, the group moved to the stone weir at Aliarusiq, immediately north of Barrow Lake. They arrived there early enough for some good fishing with the leister through the wet ice on Lake Barrow. When they found that the char started moving down, they repaired the stone weir and got ready. The fishing season was good, and Audladjut, Qimirluk, and Ubluriasuksuk filled three caches of dried char (pipsi). With the beginning of August they started hunting caribou in the vicinity of Barrow Lake. Only Ubluriasuksuk had a rifle, which he obtained from the Aivilik Eskimos in exchange for one dog. He prepared his own ammunition. Around the end of August the group moved to the artificial crossing place at Amaktuq Lake. During all their travelling inland they used kayaks. The preceding autumn these were left at Tunirtat, near the western shore of Amaktuq Lake. Around the end of April the kayaks were brought to the winter camp and covered with fresh skins at Qimikvik. Qimirluk, Qimitsiaq, Arnaktaq, and Ubluriasuksuk each owned a kayak. Audladjut was a fast kayaker but a very poor kayak maker. He did not own a kayak but shared Qimitsiaq's. Many caribou were speared from kayaks at that artificial crossing place, and enough caribou skins were secured for the new clothing of the whole group. They stayed near Amaktuq Lake until the end of September. The kayak frames were left again at Tunirtat. Three large meat caches with portions of up to ten caribou in each cache were made. Then they left for the fishing grounds along Kellett River (Kuuq). Some men had to travel twice in order to bring the caribou skins to the river. On Kuuq they settled at the place called Inirgjuak (long. 89° 37′W., lat. 68° 15′N.). There were two other camps along Kuuq. The hunters were travelling short distances along the river, fishing with leisters through the thin autumn ice. Audladjut, Ubluriasuksuk, and Qimitsiaq were putting their fish together, filling two caches. When the fishing season came to an end, they brought over some of the cached caribou meat, and the women started working on the new winter clothing. Around the middle of November all four ilagiits moved to Isurtuk (long. 90°W., lat. 68° 24′N.) where the women finished the sewing work. During the beginning of December they made the last move to the new winter sealing camp on the flat sea-ice.

The annual migration of this restricted ilagiit for the year 1918 consisted of a circuit of about eighty miles. It was conducted with the help of nine dogs and a single wooden sled. Temporary sleds of sealskin and bear skin containers for dragging were also used, all pulled by men, women, and dogs. The annual cycle reveals a summer and autumn inland adaptation characterized by sporadic or intense caribou hunting and char fishing, and a winter and spring marine adaptation marked essentially by sealing at the breathing holes. From the wide range of hunting and fishing techniques known to the Arviligjuarmiut, only a certain number were used that year—those particularly suited to the topography of the area covered by the migrating group and to the local game distribution.

The following year roughly the same route was followed; it involved only an extension of the inland journey towards Ariaksliq (Ballenden Lake) and Karmartalik lakes in central Simpson Peninsula for lake-trout fishing and some caribou drives. On its way to the Amaktuq crossing place, the group followed the migration of the south-bound caribou herds. Spring sealing was unsuccessful, and only one cache of seal oil was made.

CHAPTER THREE

The Arviligjuarmiut, the Changing Situation

In this chapter a picture of the recent socio-economic changes among the Arviligjuarmiut will be presented. As will be shown throughout the following pages, these organizational transformations have been profound. The size and composition of the basic functioning groupings have been altered. The important reciprocal exchanges previously described have disappeared, leaving, in modern times, the nuclear family as the main socio-economic unit in all seasons. Remarkably enough, this process of acculturation has not been the result of any personal and prolonged contact with Euro-Canadians. Up to the present time Pelly Bay has remained an area difficult of access. Only one intrusive agent, a missionary, took up permanent residence among these Eskimos. Although he operated a small store stuffed only with a minimum of essentials, his influence upon the organizational aspects of economic activity has been negligible. The profound changes described here appear as the result of purely technological innovations, namely the introduction of rifle hunting and net fishing. Among the northeastern Algonkians, similar organizational transformations have occurred following intensive trapping of furbearers (Murphy and Steward, 1956). On the other hand, among the Arviligjuarmiut white-fox trapping has been and still is a marginal activity, hunting and fishing remaining the main forms of subsistence. Technological innovations as the causal factor of change in the field of socio-economic organization is the principal point that will be analysed in detail.

It is also necessary to show the gradual character of the acculturative process. This is done partially in the first section of this chapter in which there is a description of the effects of rifle hunting within the framework of the 1926 Arviligjuarmiut annual cycle. In the latter sections the 1960 situation will be analysed.

THE GENERALIZED USE OF RIFLES

In this section there will be examined the changes in the sphere of ecological adaptation following the introduction of a single imported cultural element, the rifle. These transformations will be described in relation to the 1926 migration cycle of an Arviligjuarmiut group (*see* Map 3). First, however, certain details on intergroup trade relations among the Keewatin District Eskimos will be given.

Pelly Bay has always been an area where driftwood was extremely scarce. This was also true for the whole of the Netsilik country. It is only on the west coast of Adelaide Peninsula that one could hope with some degree of probability to find a piece of this precious material from which kayak frames, harpoons, and sleds were made. This fact influenced the trading relationship between the Netsilingmiut from Boothia Isthmus and the Ilivilermiut from Adelaide Peninsula. They used to meet on southern King William Island in winter. Pieces of wood were exchanged against various caribou antler implements. Only rarely did any of this wood reach the Arviligjuarmiut.

Various traditional exchanges existed also between the same Netsilingmiut and the Utkuhikjalingmiut of Chantrey Inlet. The former used to get soapstone lamps and timber for tent poles and leisters and would give whatever the Chantrey Inlet people desired. They had no special meeting place, but usually the Utkuhikjalingmiut travelled north towards Satuk Peninsula (long. 94°W., lat. 68° 50′N). There were no trading partners. In ancient times, the Arviligjuarmiut were in trade relationship with very distant tribes. Rasmussen mentions the famous Akilineq mountain near Thelon River visited by the Pelly Bay Eskimos. There they traded for timber with the Caribou Eskimos (Rasmussen, p. 26; Birket-Smith, p. 161; and Stefansson, p. 6). Iron was another scarce commodity much sought after. Rasmussen describes the following trading route used for this commerce: "(it) extended over the Rae Isthmus and Repulse Bay right down to Chesterfield where, before the later trading posts were established, they bartered knives from people who had been at Churchill, where a post had already been set up by the Hudson's Bay Company in 1717–18" (Rasmussen, p. 26).

With the appearance of new sources of iron supply, these distant journeys gradually came to an end. First, in 1829 the expedition of John Ross left considerable amounts of iron objects and timber on the shores of Lord Mayor Bay. This filled the needs of the Netsilingmiut for a long period and made them for a time the suppliers to the adjoining tribes. During the latter part of the 19th century the Aivilikmiut from Raes Welcome Sound established contact with the whalers hunting in Hudson Bay and obtained from them iron tools, beads, timber, and rifles. Gradually new trading routes were established.

At the end of the last century, the Arviligjuarmiut began to acquire various imported items from the Repulse Bay Eskimos. Most important among these were iron knives and snow knives; saws for making women's knives; iron for harpoon shafts; timber for sleds; beads; and, later, rifles. While men used to trade for iron, the women exchanged beads against musk-ox horn spoons and blubber pounders, highly appreciated among the Aivilikmiut. Dogs were much wanted by the Repulse Bay people at certain periods and were gladly received in payment for iron implements and rifles. Thus Ubluriasuksuk, around 1915, exchanged a dog for a rifle. Sometimes also fox skins changed hands. This, however, was not the first rifle among the Pelly Bay people. In 1906 old Nulialuk obtained a rifle from Amundsen. By the end of the second decade of our century all Pelly Bay hunters had rifles which they used for caribou, musk-ox, and bear hunting.

Some of the iron tools obtained by the Pelly Bay people from the Aivilikmiut were diffused among the more westerly groups. The Netsilik from Boothia Isthmus traded with the Arviligjuarmiut, exchanging a dog for an iron harpoon shaft or an iron snow-knife. These Netsilik in their eagerness to obtain timber exchanged some of these iron tools for Ilivilermiut driftwood. At the beginning of the present century a free merchant by the name of Captain Cleveland established a trading post at Cape Fullerton. In 1919 when the Hudson's Bay Company opened its Repulse Bay store, Mr. Cleveland was hired to manage the establishment, thus assuring the Arviligjuarmiut of a regular supply of iron tools, rifles, ammunition, and timber. This commerce profoundly affected the economy of the Pelly Bay Eskimos.

Kringhorn married in 1926, three years after Rasmussen crossed the Netsilik country. It was in the early winter of that year that the lake ice was only two feet thick. Kringhorn was about 20 years old, and the name of his wife was Karmatsiaq, daughter of the shaman Orpingalik. She was 14 years old. Kringhorn camped with his ilagiit at the point of Tikiranajuk (long. 92° 18′W., lat. 69° 8′N.), the large peninsula on Lady Melville Lake. In the same camp lived Kringhorn's adoptive father and grandfather at the same time, Audladjut, and Kringhorn's paternal uncles, Qimitsiaq, Ablusirjuak, and Uquqtuq. All were married. Qimitsiaq stayed in his father's igloo, together with Kringhorn. When Kringhorn brought in his wife, Qimitsiaq moved out and built himself a separate igloo. Before Orpingalik married, he was staying a few miles away with his son Kaiatuk, on the same peninsula. Later they joined Audladjut's group and remained with them for the whole year. In the Lady Melville Lake area in November they hunted caribou with rifles and fished with leisters through the lake-ice. Caribou hunting with rifles was conducted individually. Each hunter travelled on foot in a different direction, without either sled or dogs. The hunters stayed out until they made a kill, sometimes only a day, sometimes several nights. When a caribou was shot, the skin and a choice piece of meat were brought to the camp and the rest was cached under stones. Lady Melville Lake was a good caribou hunting area at that time of the year. Qimitsiaq was particularly lucky that winter and killed many caribou. They got many caribou skins, enough for two years' clothing. The older people said that it was much easier to hunt caribou with rifles than with bows and spears. It was important, however, to have enough ammunition. When the lake-ice became too thick and made fishing difficult, they decided to stop caribou hunting also, in order to save ammunition, and rely mainly on cached meat. They stayed on the Lady Melville Lake camp until January, the time for the migration to the sea-ice. Before they started on the trail, they divided among themselves all of the cached caribou meat and loaded it on the sleds. There was no cached fish left. They first reached the head of Kangirslukdjuaq inlet (long. 91° 26′W., lat. 69° 22′N.) and from there went directly towards the sealing region in front of Kangiq (long. 90° 20′W., lat. 69°N.) in Pelly Bay where they set up the winter camp. Uquqtuq had left the group earlier and travelled to Iluiliq to hunt caribou in winter. At the sealing camp arrived two more of Orpingalik's sons, Niptaiuk and the shaman Iksivalitak. Manga, the adopted son of Ablusirjuak, and Ququvak, a cousin of Qimitsiaq, with his father Igirarjuk, were there. The camp consisted of two ilagiits only: Orpingalik's and Audladjut's. Sealing was good, and several caches of seal blubber were made. The blubber was placed in sealskins and buried under the snow. Manga, Iksivalitak, and Ququvak were Kringhorn's sharing partners. That winter there was another sealing camp in Pelly Bay, located about fifteen miles west of Kugardjuk River.

In order to trade for imported supplies at the Repulse Bay store, some trapping for foxes had to be carried on. The people had already got steel traps. Kringhorn had two traps, Orpingalik four, and Qimitsiaq five. They placed the traps near the seashore not far from the camp. Trapping journeys took them a day only.

That winter Audladjut still had only one dog with a small sled about four feet long; Qimitsiaq had five dogs and a longer sled; and Ablusirjuak had four dogs with a sled. All the sleds were made of wood.

In April two men from each ilagiit, four in all, started on the Repulse Bay trading journey. Niptaiuk had five dogs and his brother Kaiaituk four. They had separate sleds. Manga joined his two dogs to his uncle Qimitsiaq's five on a single sled. The rest of the people moved camp near the little island of Nakungajuk (long. 90° 28′W., lat. 69° 7′N.) where they continued to hunt at the breathing holes. There they remained until the end of May, waiting for the return of the trading party. Then all moved again to Sadlurtalik, a larger island about eight miles northwest of Nakungajuk. There they hunted seals on the large, open breathing holes with the spring sealing techniques. Several seal blubber caches were made. Kringhorn and Qimitsiaq, caching their catch, together made five caches. Orpingalik and Ablusirjuak, however, did not participate in the spring sealing with the group. They returned early to the southern shore of Lady Melville Lake to fish in the river and cache some pipsi (dried fish). At the end of June the whole group followed on the same trail. They left their sleds at Kangirslukdjuaq. Late spring was spent fishing with leisters and fish harpoons (naulingniut) at the mouths of the rivers flowing into Lady Melville Lake. Considering that there was no hard ice left on the lake, the hunters had to walk in the shallow waters of the rivers spearing the fish on the downrun. Orpingalik and Ablusirjuak managed to dry a considerable amount of pipsi. Kringhorn and Qimitsiaq were less successful.

During August the caribou hunting season started. Ablusirjuak and Manga moved in a northeasterly direction while the rest of the group travelled in the opposite direction towards Kingardjuaq Mountains (long. 93° 20′W., lat. 68° 50′N.) where they made camp. Caribou hunting there was conducted individually. When larger herds were spotted, however, several hunters participated in stalking game with rifles. The women and children stayed in the camp. Enough skins were secured for the new clothing, but very little meat was cached. Then, around the beginning of September, before fresh snow covered the tundra, they started travelling northwards to Netsilik River (long. 93° 20′W., lat. 69° 24′N.), hunting caribou on their way. On Netsilik River, fishing with a leister and a fish lure through the thin autumn ice proved unrewarding, and they were unable to cache any fish.

At that time of the year, Kuvalaq and his father, Narjuk, were camping at the southern end of Tasirdjuaq Lake (Middle Lake, near Spence Bay settlement). Qimitsiaq and Kringhorn joined Kuvalaq, who had a sled with him in a caribou hunt northwards to Peregrine Bluff. This trip was a failure; they did not kill any caribou but survived on fish. They walked all the time, and tired and empty-handed they had to come back to Netsilik River. There was not much food in the camp. Soon after, Qimitsiaq made a lucky kill of ten caribou not far from the camp, followed by a second successful hunt that brought in thirteen caribou. That was enough for the whole camp.

Time came for the migration towards the sealing camp. It was late in November when the group left Netsilik River and started on the journey towards Pelly Bay. They had to stop at the fishing place of Tugakturvik where they fished until the end of December. The young men went to Kangirslukdjuaq to pick up the sleds and soon came back. The whole group started again towards the sealing camp near Kangiq in Pelly Bay. On their way south they picked up the blubber caches at Sadlurtalik, and it was not until the middle of January that they started sealing again.

The 1926 annual cycle, when compared with the traditional migration route of 1918, reveals numerous and striking changes. Some of these were summarized in a previously published paper (Balikci, 1960*a*, p. 4). The basic alternation of winter sealing at the breathing holes and summer-autumn caribou hunting and fishing with leisters remained unaltered. But the whole caribou hunting complex was completely transformed.

Following the establishment of regular contacts with the Repulse Bay trading post, a steady supply of rifles and ammunition was assured. This greatly simplified, intensified, and individualized caribou hunting. With remarkable speed, almost overnight, hunting at the caribou crossing points came to an end. There was no need for the hunter to wait for the herds to move in his direction. With the rifle he was free to pursue both the migrating herds and the resident caribou. Control over the caribou population increased considerably. This brought with it the disappearance of numerous technological traits; kayaks, spears for caribou hunting, bows and arrows, together with numerous associated items, were replaced by the rifle. At the same time, caribou hunting behind a taalun, big and small, was also abandoned. The numerous collaborative patterns that were associated with the traditional caribou hunting techniques also disappeared. The hunter alone could easily make a kill. A process of technological simplification and organizational individualization was in operation. Considering the great subsistence value of the caribou, efforts were made to both intensify and prolong the caribou hunting season. Traditionally, after the autumn caribou migration southwards, all caribou hunting ceased. The creaking snow rendered bow hunting impossible. This was not the case when powerful rifles were used. The 1926 cycle shows that caribou hunting took place until December, while Uquqtuq intended to hunt caribou all winter long. Fishing activities lost much of their importance at Netsilik River, where only old Audladjut and the women remained fishing while his sons in early winter went caribou hunting. The preference of caribou hunting over fishing is evident in the very choice of the area covered by the migration. The 1918 cycle was characterized by an intense autumn fishing period along Kellett River. In 1926 the group moved westward towards Boothia Isthmus where the best caribou hunting grounds of the whole Netsilik tribe were to be found. This enormously extended the territory covered by the migrating group. While the 1918 route was about eighty miles long, the 1927 trail was over 170 miles, excluding the caribou hunt to Peregrine Bluff and the trading trip to Repulse Bay. Such long journeys were made possible by the increase in the number of dogs and the introduction of imported wooden sleds. Whereas in 1918 there were 1.5 dogs per hunter, the ratio in 1927 was 3.5 dogs per hunter with numerous wooden sleds. This increase in the number of dogs, which increased both individual and collective mobility, could only come after the better game returns necessary to provide dog feed. It appears that despite certain lean periods there was a decrease in ecological pressure following greater mobility and intensified caribou hunting.

Life in the sealing camp, however, seemed not to change much in winter. Iron implements were increasingly used in breathing-hole hunting, but the sealing complex in both its organizational and technological aspects seemed little altered. In winter, however, an entirely new activity was introduced: fox trapping. It remained a spasmodic marginal occupation conducted during short day-long trips. Very few steel traps were used. There were no trap-lines.

It can be easily seen that the introduction of the rifle among these Eskimos had influenced essentially the summer part of the annual cycle, determining new forms of ecological adaptation. Caribou hunting with firearms tends to make the individual hunter the main productive unit. Food sharing and commensality patterns in summer seem unaltered. A process of individualization in Netsilik economy is beginning to operate but will become fully apparent only in the years to come.

The following sections contain a detailed description of these individualizing trends and the way in which they have affected the size, composition, and functions of the main collaborative units. Prior to their analysis it is necessary to trace the setting within which these organizational changes take place. This panorama includes the newly established network of inter-ethnic relations, some important alterations of game distribution, and the transformations in the field of technology and economy.

RECENT SOCIO-ECONOMIC CHANGES

Inter-Ethnic Relations

The years following the third decade of our century are characterized by the regularization, intensification, and diversification of intercultural relations between the Pelly Bay Eskimos and various Euro-Canadian "contact agents" (a term borrowed from Professor R. W. Dunning's study on "Ethnic Relations and the Marginal Man in Canada"). Since these growing intercultural relations are the determining factor for the recent socio-economic changes that have taken place among the Arviligjuarmiut, they should be briefly described here.

During this period the Arviligjuar country was surrounded by a ring of trading posts established by the Hudson's Bay Company at Repulse Bay, Spence Bay, and Gjøa Haven on west King William Island. This provided the opportunity for regular trading to the Pelly Bay people. Because of the extremely adverse navigation conditions in the Gulf of Boothia the Company has never built a store at Pelly Bay itself.

The main factor encouraging socio-cultural change at Pelly Bay was the establishment of a Roman Catholic Mission with a resident missionary in 1935 at the estuary of Kugardjuk River (*see* Gontran de Poncins, 1941, Part III, dealing with Pelly Bay). Since these missionaries spoke the Eskimo language fluently and lived on an intimate footing with the local people, they were able within a short period to exert a profound influence on Arviligjuarmiut ways and mores. Soon missionary and Eskimos established a pattern of 'symbiotic' relations (Chapple and Coon, 1942, p. 264; Honigmann, 1952) which will be described below, referring mainly to the year 1959–60.

The primary function of the missionary, following the almost collective conversion of these Eskimos, is the carrying out of religious rites twice a day, early in the morning and in the evening. At certain crucial moments of the individual cycle—birth, marriage, and death—the missionary administers the sacraments. Further, he teaches catechism classes to the young, usually after morning mass. Religious ceremonies are attended by most Eskimos residing at the main camp near the mission.

The economic functions of the missionary are of the highest importance. Because the Hudson's Bay Company never established a trading post at Pelly Bay, the mission housed a store with a considerable amount of trading goods. In the beginning the main items sold were ammunition, tea, tobacco, imported clothing including duffel, various iron tools, thread for making fish nets, and some sugar, flour, and lard. In recent years the proportion of imported foodstuffs increased together with the introduction of some items of smaller significance. All goods were brought on sleds in winter from Repulse Bay, the trip taking about seven or eight days. On their way down the sleds were loaded with dog food which was cached along the trail and used on the return journey. It is estimated that one dog can pull one hundred pounds of useful load. During the last two years the mission supplies have been flown in by aeroplanes.

At the mission, trading takes place twice a week; fox pelts, together with some bear and seal skins, and local handicrafts constitute most of the payments for the imported items. In recent years, government relief allocated under various forms to Eskimos has greatly increased and constitutes most of the financial basis for trading at the mission store. For certain major items, however, like wood for sleds and canvas for tents and rifles, the Arviligjuarmiut still visit the Repulse Bay or Spence Bay stores where there is a much greater variety of goods. There they trade their family allowances.

The Federal Government provides the mission with medical supplies to be used when the need arises. The patients are visited by the missionary. Difficult cases and epidemic victims are evacuated, usually by aeroplane. Because of the general decay of the shamanistic curative art and the great vulnerability of the Eskimos to epidemics produced by viruses brought in by aeroplanes, travellers, and others, the medical functions of the missionary have taken on great importance in the eyes of the natives. They are conscious that for medical treatment they are greatly dependent on the mission.

Further, the missionary teaches elementary school in the chapel, the only heated place in Pelly Bay. In the absence of tables, the children of all ages sit on the floor, learning the alphabet and a few simple English sentences. The distribution of cups of cocoa with biscuits is the highlight of these studious afternoons.

Thus the missionary, being the only permanent Euro-Canadian resident among the Pelly Bay Eskimos today, is simultaneously the contact man of numerous agencies; he cumulates functions and represents the essential link between these Eskimos and the outside world. His is a position of considerable power in the community. The Eskimo-missionary non-symbiotic relations are of equally great importance. Casually, under the form of advice, the missionary is able daily to influence the ways of the people.

For a number of years a patrol of the Royal Canadian Mounted Police visited Pelly Bay once every winter. The patrol came on sleds from Spence Bay and stayed a few days. Vital statistics were brought up-to-date, relief was distributed, and various administrative matters were examined with both missionary and Eskimos.

Once a year, in late winter, the government X-ray party lands, and the visiting doctor briefly examines the health of all Eskimos. In recent years officials from the Department of Northern Affairs and National Resources tended to accompany the medical party, inquiring about housing, local economics, and general living conditions of the Eskimos.

In the middle '50's a new intrusive agency appeared in the Pelly Bay area, namely a radar post of the DEW line system. Although no Pelly Bay Eskimos established themselves permanently near the base, boys and young men frequently paid visits to some western Eskimos employed there and returned with their sleds loaded with building material, wood, food, and other items. Visits by DEW line employees to the mission were rare and took place usually at Christmas or Easter.

Changes in Game Distribution

The generalized use of firearms in the Netsilik country produced extensive changes in the migration patterns, distribution, and numerical importance of the caribou population in this part of the Arctic. Analysing the reports of Banfield and Mair, Andrew Macpherson has summarized all the recent literature together with the result of his own investigations in the area in 1959 (Macpherson, 1960; Banfield, 1951; Mair, 1954; Tener, 1957). He concludes that the once massive migrations of barren-ground caribou wintering at or near the treeline and invading in spring the Boothia Peninsula area ceased in the years between 1920 and 1930. The main factor behind this drastic change in caribou distribution was the regular supply of arms and ammunition to the Eskimos by the trading posts. Rasmussen witnessed a caribou massacre with firearms in 1923, the very year the Hudson's Bay Company opened a trading post on west King William Island. This took place at Malerualik, on Simpson Strait, near the island of Eta, which was a favourite crossing place for the migrating caribou between King William Island and Adelaide Peninsula:

> We saw the first great herd of caribou coming trotting down over the hills... At a distance they looked like an enormous force of cavalry advancing in lines of fifty to a hundred animals... All the men seized their guns and bags, and a moment later they lay concealed here and there... This was the first real caribou massacre of that autumn, and therefore they approached unsuspiciously at the same quick trot down towards the shore, until a deafening volley of rifle fire suddenly checked them all... Shot after shot cracked, animal after animal tumbled over . . . until the whole cavalcade split up . . . and galloped back to the interior of the island (Rasmussen, p. 78).

Repeated massacres like this one disrupted and finally brought to an end the migrations of the mighty herds. On south Boothia Peninsula and Boothia Isthmus only a small number of resident caribou remained, estimated in recent years by Banfield to average 2,000 individuals. For many years no caribou have been seen on Simpson Peninsula. A small number of residents, however, roam the country between Murchison River and Willersted Inlet. The caribou, still hunted today, is more important to the Pelly Bay people living in the remote area between the headwaters of Hayes, Arrowsmith, and Kellett rivers and south of Simpson Lake.

The musk-ox herds suffered most from the introduction of firearms. These large, heavy animals were an easy target for high-powered rifles. In former times they were distributed over most of the Netsilik country. Pelly Bay informants say that today small numbers of musk-oxen are found only at the headwaters of Hayes and Arrowsmith rivers (between long. 91°–93°W., and lat. 67°–67° 30′N.). They are rigorously protected by federal game laws and never hunted. The present-day supply of musk-ox horn used in the manufacture of leister prongs comes from skeletal remains to be found in the area between Rasmussen Basin and Pelly Bay and farther south.

There is no information regarding the possible decrease of sea mammals in Pelly Bay and north of there. Formerly, Pelly Bay was regarded by all Netsilingmiut as a very rich sealing area. So it is today. Local informants were unanimous in affirming that they know nothing about seals becoming less numerous than in previous years. In spring the wet sea-ice is still covered with innumerable dark points, which are as many seals basking in the sun. On the ice-edge also, seals seem to be as numerous today as they were ten or twenty years ago.

Informants thought the same about the general distribution of fish, particularly arctic char, over their area, and this despite the recent improvement in fishing techniques, the probable increase in the catch, and the slow reproductive cycle of the char. The lower run of Kellett River, the coastal waters of the islands in front of Kugardjuk River, and the middle run of that river where the main fishing efforts of the Pelly Bay Eskimos are concentrated today are considered still to abound in char, despite intensive exploitation for many years.

Strange enough, the same is said to be true concerning the polar bear population. Along the northern and western limits of Simpson Peninsula and in various places on islands north of Pelly Bay, polar bears are at present hunted with considerable success.

Changes in Technology and Economy

In the year 1959–60 caribou were hunted by the Arviligjuarmiut in both summer and winter. Mostly young, able hunters indulged in this activity, spending much time and labour in distant trips inland. These extensive efforts, yielding modest results, were motivated primarily by the necessity of obtaining caribou furs for use in winter. The great majority of Pelly Bay Eskimos in 1959 still lived in snowhouses and depended on local resources for their subsistence. Caribou furs were thus necessary as sleeping skins in the igloos. For this use the skins of the big males shot in winter were preferred. For trapping and hunting journeys, no satisfactory substitute for caribou fur clothing was said to exist—hence the desire to hunt caribou in summer and autumn, when the hair of the caribou is short and best suited for the manufacture of outer parkas, trousers, and boots.

There are four directions generally followed by the Pelly Bay caribou hunters during their extensive winter trips deep inland. The first leads westward across Pelly Bay and along Kugardjuaq River straight to Simpson Lake where it is said caribou may be found in late winter. The other three directions point south, along the beds of the Kellett and Arrowsmith rivers and into Angujurjiriaq, the country in between. Usually a hunter who has followed the first river on his way down will return along the second, covering thus a larger area in his search for game.

Winter caribou hunting takes place usually during two periods, in late autumn and late winter, when the days become longer and travelling is easier. Late autumn or early winter caribou hunting has the fishing camps along lower Kellett River as point of departure. In early October the hunters leave the camps for a few days, taking with them fish-nets and leisters for fishing in case caribou hunting fails. The long wooden sleds they now own, pulled by large teams of dogs, allow them to travel fast and reach in a day or two the remote territory where caribou may be found. Caribou hunting in late autumn appears thus as a complementary activity to fishing along Kellett River.

In late winter, around April, the hunters start from Kugardjuk where most of the Pelly Bay Eskimos are at present located. The trip is long, taking usually a week. Hunters never venture alone during such journeys. They prefer to travel in pairs, and sometimes three men form a party. These several hunters remain always together in order to maximize their chances when a larger herd is encountered. As soon as the caribou are in sight, the hunters stop the sledge and start running toward the herd, taking brief pauses in order to shoot. After the first volley, the herd quickly disappears. The chase, however, continues since the caribou are known to be curious animals, coming to a halt for a few seconds from time to time to listen. A fast runner has time to catch up with the herd and continue shooting. Considering that running fast for prolonged periods is essential, young men have an obvious advantage over the older and otherwise more experienced hunters. In winter time the meat is loaded on the large sled and brought to the camp.

Hunting caribou in summer still involves long migrations inland. This activity appears as a survival of the caribou-hunting pattern developed with the introduction of the rifle early in this century and described with the 1926 migration cycle. The preferred time for starting on such a long journey is the end of May, before the snow has begun to melt. Wives and children join the hunters on the sledge. A small rowboat of local manufacture, extensively used in late spring when the ice on lakes and rivers melts rapidly, is also loaded. The areas where summer caribou hunting takes place are about the same, the upper runs of the Arrowsmith and Kellett rivers and the country to the west from there. Any animals encountered during the trip are hunted;

fishing is also an important activity. Leaving the camp, the hunters walk in the tundra individually, on the constant watch for caribou. Most of the meat is eaten inland, and no caches are made. If many furs have been secured, they are cached and recovered the following winter. In early September the people begin to walk towards their camps around Pelly Bay leaving the sledges behind. Such trips are said to be exhausting, and periods of hunger are frequent. Only young hunters participate. Sometimes a single family will lead the way, to be joined later by another. There are cases, however, of a single family spending the summer entirely isolated in the tundra.

Concerning the organizational aspects of caribou hunting in 1959, it is possible to repeat what has been already said regarding the 1926 cycle. Hunting caribou at present involves a very simple game-rifle-individual hunter relation and excludes any division of labour or collaboration between hunters. Men travel in pairs on these trips in order to help each other in case of accident and maximize their chances if a larger herd is encountered. Each hunter, however, is an independent unit, easily able to make a kill with his rifle.

The general decrease in the caribou population of the area produced a drastic cut in the number of caribou killed. Rasmussen in 1923, at the end of the autumn hunting season at the crossing place of Eta, noted that the seven best hunters had killed a total of 424 caribou with rifles. Considering the 1957–58 R.C.M.Police game return records for Pelly Bay, the seven most successful hunters totalled 132 caribou among them and the following year only 58. Although the modern records may suffer from inaccuracy, they indicate the very considerable decrease in caribou returns which has taken place during the last forty years.

During the last thirty years, sealing techniques have undergone profound changes. Some of these were far-reaching, producing transformations in the sphere of social organization and new forms of ecological adaptation. In the following paragraphs, first the changes in breathing-hole hunting will be described, and then three entirely new techniques: sealing at the ice-edge, hunting with automatic guns at breathing holes, and summer sealing from canoes.

Traditionally, sealing at the breathing hole involved the use of a large number of specialized tools, mostly made of caribou antler. Two kinds of seal indicators were used, the down indicator and the horn indicator with or without a ring at the end. In former times, the whole harpoon, including the point, was made of caribou antler, strengthened with sinew lashings. Today the harpoon consists of a long iron rod with a detachable iron point and a wooden handle. The seal-hole tester is also of iron, with a small wooden handle. Only one type of seal indicator is used today. It is a thin iron rod with a small ring on its upper end to which a string is attached. This string, tied to the seal-hole searcher lying horizontally on top of the ice, holds the indicator suspended in the breathing hole. Sealing in this manner appears as a simplified technique compared to the numerous implements used in traditional breathing-hole hunting.

Despite the introduction of iron implements and technological simplification, sealing at breathing holes in recent years has been almost completely abandoned. At the main winter camp near the mission at Kugardjuk in the winter of 1959–60, only one sealing expedition to the breathing holes took place. A dozen men participated; it lasted a day and netted one seal only. During the same winter there was another camp on the sea-ice near Tikirardjuarardjuk (long. 90° 3′W., lat. 68° 25′N.) consisting of three related families. There, breathing hole sealing was practised more frequently with very poor results. In April 1960, the youngest hunter at the camp complained that despite repeated efforts he had failed to catch any seals at the breathing holes.

Two factors may have contributed to the decline of this traditional sealing method; first, the introduction of simpler, less tedious, and considerably more efficient sealing techniques in both winter and summer; second, the lack of the proper caribou fur clothing necessary for the long waiting periods under intense cold while watching for the seal to come.

The introduction of the rifle with ample supplies of ammunition was instrumental in the spreading of an entirely new sealing technique: hunting at the ice-edge. The method is simple: the hunter walks along the ice-edge, watching the open sea water for seals to show for breathing. As soon as this happens, the seal is shot with a rifle. Next, a small rowboat is pushed into the water, and the seal is recovered with the harpoon. Where favourable sea currents are present, the rowboat is unnecessary, and the drifting seal is easily harpooned from the ice-edge. Since seals are rich in fat at that time of the year, no seals sink before they are harpooned. The simplicity and efficiency of this sealing technique explain its adoption by most Canadian Eskimos today.

The areas where sealing in this manner is most widely practised by the Pelly Bay Eskimos is the ice-edge between north Simpson Peninsula and the Harrison Islands and along the west coast of Simpson Peninsula. In early winter, however, until December, sea currents keep a small area free from ice south of Imilik Island (long. 90° 12′W., lat. 69° N.). Sealing in these pockets of open water is particularly successful.

Sealing trips starting from the Kugardjuk camp rarely take longer than a week. Considering that two days' travel is necessary to reach the ice-edge, the hunters remain near the open water for two or three days. Although frequently single hunters go sealing, in most cases two or three men travel together. They are not accompanied by their families. This is essentially an individualistic technique, each hunter looking for his prey alone, despite frequent services performed by a man for his companion during travelling or at the temporary sealing camp. Since ice-edge hunting is considered dangerous and accidents in the past have been numerous travelling in pairs is preferred.

The number of seals caught in this manner is impressive. In the winter of 1923 at the camp of Kuggup Pamiut near Shepherd Bay, visited by Rasmussen, twelve hunters caught about 150 seals during the whole winter season (Rasmussen, p. 153). The ratio is about twelve seals to a hunter. In November 1959, Angutingurniq of Pelly Bay killed eighteen ringed seals and one bearded seal in three days in the open water south of Imilik Island! On February 27, 1960, Apsiaktaut, Akkrak, and Nirlungajuk brought respectively eight, seven, and four seals after four days' absence. Because of the relative abundance of seals around Pelly Bay and the efficiency of ice-edge hunting, the Arviligjuarmiut consider themselves very well supplied with seal meat and blubber.

Another effortless sealing technique is employed today by the Pelly Bay Eskimos in winter. Automatically-operating rifles, tipped with harpoon points and triggered by an iron indicator, are placed on top of the breathing hole. The hunter simply sets the apparatus at the proper place and returns periodically in the days following to recover the catch. Most Pelly Bay hunters own automatic rifles and easily collect numerous seals in this manner. This was the preferred technique of Kaiaituk, an elderly hunter from the southern Pelly Bay camp who avoided undertaking the long journey to the floe but managed with his two automatic rifles to supply his family with fresh seal meat and blubber.

While spring sealing with iron harpoons at the enlarged breathing holes is still intensively practised with excellent results, the short summer season in recent years has also become a period of intense sea-mammal hunting. This became possible following the introduction in the area of numerous Peterboro canoes, some rowboats, and one whaleboat. The most intensive sealing period begins around the middle of August when seals become increasingly fat and do not sink quickly when shot (*see* McLaren, p. 68), thus giving the hunter time to approach his prey and retrieve it with his harpoon. Only rarely do isolated hunters seal alone from their canoes in this manner. Most of the time several men participate in common summer expeditions. The best rifle hunter (not necessarily the eldest of the group) sits on the bow of the craft controlling the area immediately in front. He acts as pilot and with hand and verbal signals gives directions to the operator of the outboard motor behind. Two or three hunters sit in the middle, controlling both sides of the canoe. When an area is reached where seals are numerous, the canoe comes to a standstill, and the hunters, ready with loaded rifles in hand, begin the intense watch. Seals are considered curious animals and seem attracted by the sight of the strange craft. They gradually approach, bring their heads above the surface of the water to breathe and observe, and become a convenient target for the riflemen. The hunter who has the best position in the canoe facing the seal shoots first, as fast as he can after the seal has appeared on the surface. In case the seal is shot, usually through the head, the motor is set in motion, and the canoe reaches the floating seal, which is pulled aboard with or without the help of a harpoon (For a description of a similar technique among the Port Harrison Eskimos, East Hudson Bay, *see* Willmott, 1959, p. 44; and for the Iglulik Eskimos, Mathiassen, p. 46). Summer sealing from canoes can be practised only during fine weather, when the breathing seals can be easily spotted on the calm sea surface. It should be noted that during sealing trips several fish nets are checked. The two activities are thus combined.

Summer sealing from canoes appears as an organized activity, requiring a certain division of labour (pilot, riflemen, motor operator) and some collaborative patterns. These cooperative forms are new, the result of technological innovation, and have no counterpart in the traditional culture.

The whole central area of Pelly Bay is considered good for summer sealing. Hunters, however, remain in the vicinity of their camp since these expeditions last only a day. Hunters from Kugardjuk usually hunt in the area in front of Qimikvik Island. To hunt bearded seals in spring or summer, a temporary camp is established by some Eskimos at Kangiqluk Bay (between Helen Island and Simpson Peninsula), considered an excellent area for this species.

Further, the missionary has placed a seal net in front of the estuary of Kugardjuk River, with satisfactory results. The Eskimos, however, have not taken up sealing with nets.

The general results of summer sealing are highly rewarding. During the summer of 1959, Angutingurniq killed a total of thirty-two ringed seal and eight bearded seal. On September 3, 1959, three hunters in each of two canoes killed seven and eight seals respectively in a single day. The same summer, during a sunny afternoon, Kringhorn caught four seals from a rowboat.

The introduction of the rifle among the Pelly Bay Eskimos has greatly increased the seal returns. The new techniques are simpler, require less effort, and produce better results. Winter sealing has become markedly individualistic, whereas summer hunting requires new collaborative patterns. Undoubtedly ecological pressure has sharply decreased among the Pelly Bay Eskimos. The consequences of this decrease in the sphere of social organization and settlement patterns will be analysed in the following section.

* * *

Important changes also took place in fishing technology, parallel to the survival of traditional methods of catching fish.

In early times numerous stone weirs (saputit) existed all over the Pelly Bay area. Today only one is in operation, on Kugardjuk River, about eight miles from the coast. Fishing on the saputit seems little changed in comparison with traditional times, and it is useless to repeat here what was said previously. One innovation may be mentioned; the central part of the saputit, where the actual spearing takes place, is encircled on the outside by a long net. Thus no fish at all can escape upstream. Fishing at the Kugardjuk saputit takes place during the last two weeks of August and in recent years has still been considered a rewarding activity. During August 1959, because of a temporary lack of fish, only two families spent some time on the saputit. They were visited by occasional single hunters who remained only a few days and then left the locality, discouraged by the poor progress made in catching and drying fish.

Leisters with musk-ox horn prongs continue to be used not only on the stone weirs but also during autumn and spring fishing through the ice on lakes and rivers in the traditional manner with the help of lures. Fishing for lake trout with hooks through the thick winter ice is rarely practised, despite the introduction of the heavy iron ice-pick which considerably speeds the ice-cutting process. The traditional and best fishing grounds of the area along Kellett River have not lost any of their importance. Every autumn all the Pelly Bay Eskimos congregate there in several camps. That is the time when fish, in quantities sufficient for most of the winter, is cached in ice caches. Along Kellett River most of the fish taken today is caught with the help of nets.

Fishing nets were introduced among the Pelly Bay Eskimos by the first missionary around 1936. Today they are used both in summer and autumn, under the thin river ice. When the ice is 4 to 6 inches thick on Kellett River, four series of small holes are made in the ice, along a line. A wooden pole with a rope attached to the end of it is pushed under water through the first hole and seized at the next, and so on. When the last hole is reached, the pole is pulled out, the rope detached, and a net attached at the other end of the rope. Then the net is pushed into the water, and with the help of the rope it is placed under the series of holes. Usually nets for fishing under ice are short and thus easy to operate, and, when a number of fish are caught in them, they do not become heavy to the point of sinking.

The introduction of nets undoubtedly increased the fish returns, and further simplified and eased the process of fishing. Writing about stone weir fishing in 1923, Rasmussen says: "Later on in the summer season . . there is often such a wealth of fish at Amitsoq that, in the course of fourteen days, every family can catch so much that they are able to make three or four caches of good, fat trout for the winter. Each cache represents between two and three hundred kilogrammes" (Rasmussen, p. 66). At present, it is estimated that an able fisherman in about four weeks, from the middle of October to the middle of November, can, with the help of nets, fill seven to nine caches of fat fish. Some hunters, for various reasons, return to the Kugardjuk camp after only two to three weeks of fishing at Kellett River; during that time they have filled two or three caches, an amount sufficient for their winter needs.

Fishing with nets which are individually owned is an individual activity despite the fact that two people are usually necessary to place a net under the ice. One man alone is sufficient to collect the fish, and in summer individual fishermen operate the nets.

* * *

In relation to the traditional subsistence economy of the Netsilingmiut, trapping is an entirely new activity. The trapping season starts around the middle of December and continues until the middle of April, the darker months of the year when seal hunting is not intensive. At present, trapping is done exclusively with steel traps, purchased at the trading stores. Stone or ice traps are no longer built. Usually seal meat is used for bait.

In comparison with the large number of traps owned by the Eskimos of several eastern or western arctic communities, the Pelly Bay Eskimos today use only a few traps. There is, however, a great difference in the number of traps owned by individual Pelly Bay trappers. Alakanuaq and Imingaq, two young brothers, own only one trap each. Sigu, a young hunter, owns three; Kaiaituk, an elderly man, two; Angutingurniq, an able middle-aged hunter, five; Apsiaktaut, nine; and Irquvaktuk, apparently one of the best and most steady trappers, thirty-three. Kakaiarniut, a recent immigrant from Repulse Bay where trapping is a highly developed activity, has twenty. The sheer number of traps owned by different Pelly Bay Eskimos is indicative of the attention given by them to trapping as a remunerative activity. It is possible thus to consider two categories of trappers among these Eskimos, the first relying less on trapping, the second taking trapping as a more important activity.

The best way to survey the ecology of trapping is to note the location of traps in the Pelly Bay area. Let us see where Irquvaktuk has placed his. When he travels to the ice-edge in winter, he follows the road from Kugardjuk camp with his sled, travels on the sea-ice along the west coast of Simpson Peninsula, then follows the east coast of Helen Island. From there he moves in a northwesterly direction to the Nakungajuk Islands (long. 90° 28′W., lat. 69° 7′N.) and then northeast to the ice-edge along the east side of the Harrison Islands. At certain locales along his route he places his traps (*see* Map No. 3, points marked O). These he leaves for the whole winter. His sealing completed at the ice-edge, he returns along the same route, checking the traps and collecting the fox.

A similar route is followed also by Uugaq, who places his four traps not far from the ice-edge where foxes are believed to feed on the seal carcasses left by the bears. Apsiaktaut first crosses Pelly Bay and places his nine traps along its western coast, up to the Harrison Islands.

Some hunters, during their wanderings in the country, may spot an area where fox tracks appear numerous. In this case they may decide to remove their few traps from the sealing route and spread them in the more favourable spots. Such a decision was taken by Apsiaktaut in March 1960. Dissatisfied with trapping conditions along the west coast of Pelly Bay, he placed his traps on Simpson Peninsula west of Kugardjuk, where travellers coming from the ice-edge on Committee Bay told him foxes were plentiful.

The traps of a hunter may be checked by a relative, who brings the catch to the camp. Thus the elderly Kaiaituk never visited his trap in the winter of 1959–60. This was done by his nephew Sigu. Finally, some hunters never bother even to place their traps, thus neglecting trapping completely.

From the preceding notes some important conclusions may be drawn regarding the place occupied by trapping in the contemporary economy of the Arviligjuarmiut. Trapping in that area seems to have made few advances as a distinct activity since Rasmussen's time.

Although the total number of steel traps has considerably increased, only a small number of hunters have benefited from this. Further, there is little evidence that trapping has become a distinct and important activity, unrelated to hunting. On the contrary, the very fact that traps are usually placed along the sealing routes and checked on the return journey from the ice-edge makes trapping a complementary activity to sealing. The sealing route in no way should be confused with a trap-line. There are no distinct trap-lines among the Pelly Bay Eskimos today, such as exist among numerous other Eskimo groups. The fact that traps are removed in mid-winter tends to further support this. Only in a minority of cases does one find traps checked for this purpose only. Angutingurniq, from a southern camp, checked his five traps at Imilik Island without indulging in any sealing (previously he placed his traps there because he had been sealing at the nearby pocket of ice-free water). He combined this, however, with a prolonged visit to his relatives at the Kugardjuk camp through which his route passed.

* * *

In 1960 the Pelly Bay Eskimos' ways of procuring a livelihood may be characterized as a transformed subsistence economy. Various geographic and situational factors may explain this. The remoteness of the area and the unfavourable ice conditions in the Gulf of Boothia and in Fury and Hecla Straits have precluded the establishment of a trading post by the Hudson's Bay Company. With the absence of Euro-Canadian traders, and despite the fact that Pelly Bay is considered good 'fur country,' trapping was not encouraged as an essential activity. The limited number of imported goods at the mission store did not constitute an important incentive for an energetic search for cash income, or consequently for trapping. The abundance of game in the area and the introduction of rifles and nets which facilitated hunting and increased the game returns obviated the necessity to import larger amounts of foodstuffs. Wage employment possibilities either did not exist in the area, or later, when the nearby DEW line site was established, did not receive the encouragement of the local missionary. All these conditions helped the Eskimo to live off the land. The introduction of the rifle, however, brought about the abandonment of numerous traditional techniques and a general individualization of hunting practices. Contemporary Pelly Bay economy is characterized essentially by highly successful rifle sealing, net fishing, and the absence of systematic trapping with trap-lines. The need for new rifles and ammunition, canvas for tents, imported clothing, and a few imported foodstuffs established firm symbiotic links between the Pelly Bay people and the Euro-Canadian economy.

In the following sections the impact of the recent changes in technology will be described, as well as several related activities and their impact on the organization of economic life. An effort will be made to compare the size, the functions, and the composition of the traditional basic units with those of the present time. This will give a clearer picture of the extent and significance of the changes that have taken place in these sectors.

PRESENT BASIC SOCIO-ECONOMIC UNITS

In order to better understand the shifts in function of the different socio-economic groupings, it is important first to note certain changes in the distribution of the local population. Traditionally it was common for individual families and even whole restricted ilagiits to move out of their traditional hunting grounds and spend one or more seasons in some adjoining area, where they joined with the local Eskimos. The regions where the Pelly Bay people were in the habit of moving to for prolonged periods were Thom Bay and Boothia Isthmus. Thus contact with more or less distant relatives was maintained. With the establishment of trading posts at Gjøa Haven, Spence Bay, Fort Ross (later closed), and Pelly Bay, the economic dependence of the Eskimos on these centres increased in time. The trading post became the point of gravity of most local migrations. Displacements of groups of families between distant regions gradually decreased. This process operated also for the Pelly Bay Eskimos. Visits to the trading posts at Spence Bay and Repulse Bay, as mentioned above, took place in winter, but for very brief periods and for this specific purpose only. The few immigrants into the area in recent times came with the specific purpose of marrying on Arviligjuarmiô. They usually remained in Pelly Bay. This factor of increasing stabilization of the Pelly Bay Eskimos has led to their gradual isolation from the adjoining groups (a similar process of stabilization has been described by Leacock for the Montagnais Indians, Leacock, 1954, p. 20). Today the Arviligjuarmiut have stronger feelings of identification with the particular country where they now live than they had in traditional times. This relative isolation of the Pelly Bay Eskimos is a factor in the tendency for the search for prospective mates within the local group. It is only when suitable mates are not to be found within the group that alternative choices are looked for outside. This tendency toward relative group endogamy found encouragement in the fact that, although all Pelly Bay people are Catholic, most of the neighbouring Netsilik were converted by Anglican missionaries.

During the early part of the winter of 1959–60 there were three camps of unequal importance in the Pelly Bay area. At the southern end of the Bay, on the sea-ice not far from Tikirardjuaq, three nuclear families resided on the western shore of Pelly Bay (lat. 68° 30′N.). The majority of the Pelly Bay Eskimos, about one hundred, were grouped for the winter around the mission, at Kugardjuk. The factors determining the location of the first two camps away from Kugardjuk are highly complex and constitute a synthesis of ecologic, economic, religious, inter-ethnic, and personal considerations (a paragraph by Margaret Lantis indicates the complexity of motivations in regard to annual cycle movements (Lantis, 1954, p. 313).

The Extended Ilagiit

In comparison with the traditional situation, few changes are apparent today in the different aspects of the extended ilagiit. The large kindred was a kinship grouping of minor importance in traditional times, and so it is now.

There is no evidence that the composition of the kindred has undergone substantial changes during the last three or four decades. When elderly persons were asked about the extension of their kinship in traditional times, at a period when these informants were young boys, they listed mostly consanguine secondary, tertiary, and still more distantly related people. In their present kindred, these same informants tend to include today a growing number of affinals, primary relatives of the wife and of the descendants' mates. A number of first and second cousins of deceased parents are also listed. The presence today of an increased number of affinals may be explained in two ways. First, it indicates a trend proper to the developmental cycle of the extended ilagiit itself, characterized by a gradual disappearance of the consanguines of the ascending generations, the extension of the circle of relatives among the lower generations, and the growing importance of affinals with whom the informant increasingly interacts, collaborates, and associates. Secondly, it may be indicative of a change in the local settlement patterns. The establishment of a mission with a trading store has acted as a powerful, attractive force for the Eskimos, isolating them from their neighbours. Since most Pelly Bay Eskimos now reside together for a great part of the year and tend more and more to marry among themselves, they have new opportunities for interaction and association with their affinals; hence the growing importance of the latter as part of one's kindred.

The relative stabilization of the Pelly Bay Eskimos may thus be considered as indicative of a trend toward increased co-residentiality of the kindred, which is essential for the younger people. Older Pelly Bay Eskimos today easily trace over the whole Netsilik area distant relatives with whom they have been associated in the past. For many boys and girls, however, most of the near and more distant relatives they have known are at Pelly Bay, though numerous distantly related people, of whom they have only heard, live outside Pelly Bay. This tendency towards co-residentiality of the kindred is related to the trend towards group endogamy. It is too early yet for its effects to be clearly perceived. For the contemporary period it is safer to conclude that the kindred, despite some recent and limited evidence to the contrary, is still not a co-residential grouping. As has been pointed out in the section on the traditional kindreds, since these are loose and overlapping units, no extended ilagiit headmen can possibly exist. This is as true today as it was in the past. The same can be said in regard to the kindred as a possible economic unit. The fact that the extended ilagiit is not a discrete social unit makes it impossible for any collaborative patterns at the kindred level to emerge. Further, the kindred is certainly not a religious unit.

Previously we noted the traditional function of the extended ilagiit as the social area of personal security. That was at a time when wife-stealing and murder created numerous interpersonal and intergroup hostilities. With the arrival of various Euro-Canadian agents in the area enforcing western norms of behaviour, most of the factors causing these tensions gradually disappeared. With female infanticide coming to an end, the disequilibrium in the sex ratio noted by Rasmussen was somewhat reversed. In January 1959 there were 62 male and 65 female Pelly Bay Eskimos. With the traditional demographic disequilibrium petering out, the numerous wife-stealing practices also disappeared. At the same time an important cause for murder vanished. The importance of the kindred considered as the widest social sphere of personal security was thus greatly diminished.

Malevolent witchcraft, however, the cause and result of interpersonal strife, is continuously practised up to the present. This source of constant interpersonal suspicion considerably influenced the choice of prospective mates made in recent times. Thus, for marriage, relatives were constantly preferred to non-relatives. Since within one's kindred, marriages with first cousins were strongly encouraged, this fully developed pattern of cousin marriage will be described in the following section dealing with the restricted ilagiit.

The Restricted Ilagiit

There is no evidence of any changes in the composition of the restricted ilagiit. Informants recognize their primary relatives, uncles and aunts on both father's and mother's side, most first cousins, and a few important affinals as members of their restricted ilagiit. Although restricted kinship recognition as such seems unchanged, certain relations between restricted ilagiit members seem to have been altered following the economic transformations described previously.

In regard to residence patterns, a wide range of variation is exhibited today by the various restricted ilagiits. Certain ilagiits during all seasons camp away from the main body of Pelly Bay Eskimos located at Kugardjuk. In the summer of 1959 at the southern end of Pelly Bay were to be found old Niptajuk with his wife and numerous descendants: two adult sons, Angutingurniq and Inuksak (one married), and several small grandchildren. In the autumn of the same year Niptajuk died; his brother Kaiaituk moved into the camp with his married nephew Sigu; and Inuksak with a sick child of his decided to settle temporarily at Kugardjuk for medical treatment. This restricted ilagiit camped for a whole year as a separate unit, despite the fact that some of its members moved out temporarily. At the same period on the western coast of Pelly Bay a stable alignment of two brothers, Usuligardjuk and Kutsiutiku, with their descendants, camped in isolation. Though traditionally such isolation of the restricted ilagiit was a common occurrence in summer, it was contrary to the winter pattern of large camps consisting of several restricted ilagiits. This change in size of a winter camp was possibly a result of the introduction of new and more efficient hunting methods and a general decrease of ecological pressure. Ice-edge individual sealing with rifles eliminated the necessity for large winter gatherings at the breathing holes, allowing for small isolated groups to adapt successfully to their winter environment.

At the main winter settlement at Kugardjuk the remaining restricted ilagiits resided. It is to be expected that closely related people will settle in clusters of snowhouses, as is the case among many other Eskimo groups, the topographic distribution of the dwellings reflecting the kinship relations of the people. This is in fact the case with a number of restricted ilagiits, but not with all. In the winter of 1960 Kringhorn with his descendants camped close to his son-in-law Uugaq. This man, however, remained near his adoptive father, Kripingaiuk, and the latter's son Kajasksak. Another cluster was formed by two brothers, Irquvaktuk and Itimangniq, and the latter's brother-in-law Tungilik. At the same time elderly Anirnilik camped alone with his family at the opposite end of the settlement, isolated from his relatives. In the 1956 map of the winter Kugardjuk camp published by Steenhoven, it is indicated that Irquvaktuk camped separated from his relatives. In 1960 Kanaiuk and Krabvik, two brothers, camped at the two ends of the settlement. It will be shown below that topographic isolation even within a large settlement is usually the expression of a desire for economic self-sufficiency. The hunters who camp alone manage to subsist with a minimum of economic collaboration with their camp-fellows. Only the transformation in hunting techniques towards increased individualization can explain these changes in residence patterns affecting the restricted ilagiit.

At the autumn fishing grounds, along Kellett River, it is equally possible to see some hunters leaving their relatives and camping apart. Such was the case of Itimangniq in 1959. The Pelly Bay Eskimos split into three groups, the first setting camp at Matjok, the second at Kitingusaq, and the third at

Kunguardjuk; Itimangniq resided alone with his family farther upstream at Inirdjuit. The reason given was that able and steady fishermen operating with nets have a better chance away from large camps and intensely exploited areas. A technological innovation, the fishing net, is again responsible for temporarily splitting a restricted ilagiit.

For spring and summer sealing some restricted ilagiits usually joined by more distant relatives leave Kugardjuk and settle near some good sealing area, generally along the northwestern coast of Simpson Peninsula. Logan Bay, rich in bearded seals, regularly attracts summer visitors.

In order to benefit from the changing ecologic and technologic conditions, certain restricted ilagiits at given periods have acquired new adaptation strategies. Considering that summer sealing can be successfully conducted by only one, two, or three hunters, some members of a restricted ilagiit can indulge in other summer hunting activities, such as caribou hunting inland, or fishing at the stone weir. The returns from these pursuits are later shared by the members of the restricted ilagiit. This produces further temporary splitting of the restricted ilagiit. Examples of this form of adaptation will be given later, in the section dealing with the contemporary annual cycles of the Pelly Bay people.

Following the trend towards increased stabilization and concentration of the Arviligjuarmiut in one settlement, certain changes in residence patterns may be observed today. In traditional times a girl used to leave her parents' dwelling and settle in the camp of her husband. At present this is increasingly less necessary since most prospective mates are residents of the large Kugardjuk camp. When Alakanuaq married in 1959, his wife, Qarlikittuk, who was living nearby, moved into his dwelling, without changing camp. The same applied to Tungilik, who married Tiriatnaq in 1960. Thus the rule of patrilocal residence still prevails, but in a much more limited sense.

There is no evidence that today newlyweds form separate commensal units. They may or may not reside in a separate tent in summer, but generally in winter they live in the husband's father's igloo or in a joint igloo with a common porch.

In conclusion, one may again point out the great variation in residence practices among the restricted ilagiits today. The members of some restricted ilagiits seem to prefer camping together, either in isolation or in proximity with other ilagiits at Kugardjuk. Most, if not all restricted ilagiits are split occasionally for a whole season. Moreover, some individuals seem to pull apart from their relatives in a more permanent way. Ecologic and technologic transformations are mainly responsible for the changes in residence practices affecting the restricted ilagiit.

Similar economic transformations are also responsible for the narrowing of the field of traditional exercise of leadership. Previously it was pointed out that the organizational leaders of caribou hunting from kayaks at the crossing places, winter aglu sealing, and fishing at the stone weirs were restricted ilagiit headmen. With the abandonment of the first kind of hunting and the drastic decrease in importance of the latter two, the very basis for the exercise of traditional leadership disappeared. The rifle, the fishing net, and the steel trap have assured the organizational autonomy of the individual hunter. Despite these effects, some important forms of leadership within the restricted ilagiit are observable today, adapted to the new ecologic setting.

The individualizing tendencies of rifle hunting and net fishing, parallel to the stabilization of the people around the Kugardjuk mission, produced a marked increase in individual mobility, especially in the long winter period when most of the Eskimos' travelling takes place. While women and children stayed in the camp, the hunters were sealing at the ice-edge, chasing caribou inland, or trading at Spence Bay. This greater mobility of the hunters became subjected to the control of restricted ilagiit leaders. Often an adult son will consult his father or grandfather about his travelling plans. A younger brother will refer to his elder brother, or a nephew to his elderly uncle. It should be pointed out that a marked difference in age now seems essential for the exercise of such leadership which takes the form usually of approval and advice. We can again quote young Akkrak, referring to his stepfather Ulik "I request his thoughts with regard to far travels . . . . I will go if Ulik tells me so . . . if I have not much dog food and he tells me to go deer hunting . . . I will go . . . ." (Steenhoven, p. 24). Such a clear superordinate-subordinate relation exists only when a great age difference is involved. When no outstanding elderly headman is present, and when the restricted ilagiit consists essentially in an alignment of brothers, no such authority relations can be observed. Irquvaktuk, age 42, his brother Itimangniq, age 51, and the latter's brother-in-law Tungilik, age 40, considered themselves as forming a restricted ilagiit. Itimangniq, an excellent hunter, was recognized in 1960 as the inhumataq, after the death of old Ulik, Tungilik's father's brother. Irquvaktuk consistently used to pull himself apart from his relatives, despite the fact that he camped near them. He kept them informed, however, of any important decisions he made regarding his hunting trips. The relationship between Itimangniq and Tungilik was more intimate, but it lacked any superordinate-subordinate character. Tungilik recognized himself as just an average hunter and confirmed that he valued Itimangniq's opinions. To the question: "Who is the inhumataq of your ilagiit?" Tungilik replied in an oblique fashion: "I hear that now that Ulik is dead, Itimangniq is our inhumataq." In this particular case the laxness of Itimangniq's authority may be understood as a result proper to the developmental cycle of the restricted ilagiit. It is doubtful, however, whether this would have happened if the rifle had not increased the autonomy of the individual hunter, allowing Irquvaktuk to forego the help of his relatives.

Summer canoe-sealing conducted by small groups of hunters provided the setting for the emergence of new patterns of leadership. Summer sealing was sometimes undertaken by single hunters in small rowboats. More often small groups of related people participated in these hunts in powered canoes. The organizational aspects of this activity were described previously. In one such sealing trip, during the month of August 1959, four hunters participated: Itimangniq, Tungilik (owner and operator of the outboard motor), Tungilik's son, and old Ulik, inhumataq of the ilagiit to whom all belonged. Characteristically enough, it was not Ulik who acted as pilot and organizational leader of the expedition, but Itimangniq, the best hunter. Considering that summer canoe-sealing requires a pilot-coordinator, it is significant that the ilagiit inhumataq stepped down in front of the best hunter, producing a temporary shift of leadership.

Briefly, with the disappearance of the ecological basis of traditional leadership, a certain narrowing of the field of inhumataqship is observable today. Contemporary superordinate-subordinate relations are most clearly perceived at present when a considerable age difference is involved. Summer canoe-sealing necessitates some new forms of leadership. In the final analysis the changes in leadership can be attributed to the transformations in ecology and technology.

Let us now examine what the present-day attitudes of restricted ilagiit members are towards blood-revenge. At first, one may note that, following the arrival in the Netsilik area of numerous Euro-Canadian contact agents, including an R.C.M. Police constable at Spence Bay, no recent cases of physical murder have occurred. There is evidence, however, that numerous instances of murder with the help of evil magic (ilihiitsut) or other supernatural techniques have occurred recently, and the emergence of feuding factions within the group of Pelly Bay Eskimos has been the result. Two very recent cases will be described here.

K, a very old woman, who bore the name of the polar bear, entertained special relations with the powerful soul of this animal because of this very fact. Just before her death, *K* cautioned the people to avoid killing female polar bears with cubs for some time. Soon after, two young men, belonging to a different restricted ilagiit, encountered a polar bear with cubs during a trip and killed them. The following summer the men were drowned accidentally. The people interpreted these deaths as revenge taken by *K*. It should be noted that the deaths occurred in a different ilagiit from *K*'s.

Just before this took place, there was an interesting case of evil magic involving young *L* and his opponent *A*. The object of the quarrel was a young woman, *G*, promised in marriage to *L*, son of a shaman and a shaman himself. *G* for personal reasons refused to marry *L* and instead preferred *A*, who belonged to a different ilagiit. Both *L* and his paternal uncle *N* took revenge by performing ilihiitsut, *L* having operated apparently in the porch of the ceremonial igloo on Christmas Day. Shortly after, *A* died of 'sickness' while sealing at the ice-edge. Here, the kinship relations of the people involved are more complicated. While *L* and *A* belong to different and distinct ilagiits, *G* and *L* are natural first cousins through their fathers. *G*'s father *V*, however, was adopted by somebody else and grew up apart from his natural ilagiit. Recently, and probably earlier, *V*'s relations with his natural ilagiit have been very tense, and he has been avoiding his natural relatives. Despite this, *L*'s attack was directed mainly against *A*, a man from a different ilagiit, and not against his natural cousin *G*.

In the early winter of 1959–60 an epidemic killed several people. The evidence collected suggests that these new deaths were interpreted as the result of the malevolent supernatural activities of two factions. One of these factions was identified as a restricted ilagiit and probably a few related families. The other faction was supposed to consist mainly of one ilagiit which probably joined forces with a second ilagiit. Some families, in great fear of further and dreadful developments, kept aloof.

The practice of witchcraft thus strengthened the 'we' feeling of the restricted ilagiits, increasing the function of the ilagiit as the social sphere of personal security. Hostility was directed towards the other ilagiits, and new deaths were considered as a revenge for previous victims. Although it is difficult to consider these developments exactly as blood-revenge since it is rarely that the performer of ilihiitsut can be identified and thus his kinship relations to the victim remain obscure, the intent of revenge is present and its consequences are observable. It is assumed here that fear of witchcraft was one factor, among several others, that was instrumental in effecting the recent emergence of a highly developed cousin-marriage pattern. Although this is not the place for a detailed discussion of contemporary Arviligjuarmiut marriage practices, it should be noted that for this small group of 120 individuals, seven recent marriages were between first cousins, both cross and parallel. In 1960 there were eight promised marriages between cousins involving children of various ages, and in recent times six promised cousin marriages did not materialize, mostly because of the deaths of the future mates. These numbers do not include promised or realized marriages between second cousins. It is clear that an obvious tendency exists to choose a brother's or a sister's immediate descendant as a future mate for one's child. Mates are looked for among the members of the restricted ilagiit with the hope that the married descendants will remain near all four parents instead of going to a strange land among foreigners who might behave hostilely, essentially with supernatural means.

Although leadership patterns have recently become narrower and less obvious than they probably were in traditional times, revengeful and aggressive witchcraft, together with the cousin-marriage practices, seems to have strengthened the feeling of social solidarity of some restricted ilagiits. Hence restricted ilagiits may still be considered as distinct social units.

The most important changes affecting the relations of the people within a restricted ilagiit are in the field of economic collaboration. To add to the previous description of the organizational aspects of hunting, the kinship composition of the contemporary basic economic units will be analysed in the paragraphs which follow. Let us first see whether in the field of food acquisition the hunters travelling together are relatives.

Previously it was noted that single hunters frequently engaged alone in ice-edge sealing. In the winter of 1959–60 such was the case of Uugaq. More often two or three hunters preferred to travel together: Apsaktaut and his brother Akkrak; Tungilik, his father's brother Attar, and Kagutar, an Aivilik Eskimo recently married to a Pelly Bay woman; Apsaktaut, Akkrak, and Nirlungajuk, not from the restricted ilagiit of the first two; Uugaq and his wife's brother Imingaq, of the same restricted ilagiit; and Angutingurniq and his first cousin Sigu. Sometimes larger groups of sealers are formed: Nalugiaq and Sigu of one ilagiit; Alakanuaq and Imingaq, two brothers, closely related to the first two but considering themselves as belonging to a different ilagiit; and Akkrak and Kagutar, not related to the others.

First it can be noted that not all members of a restricted ilagiit seal together; instead, only two close relatives usually start on the hunt. To that duo can be added a second couple from a different restricted ilagiit, or one or more unrelated hunters. Thus the ice-edge sealers only rarely all come from a single ilagiit. Considering that ice-edge sealing and trapping are closely related, the same applies to the trapping parties. A group of sealers will usually split on its way back, each hunter checking his traps. It should be remembered that when the traps are placed near the camp, they are checked by one man only.

Caribou hunting parties, both in summer and winter, reveal a similar composition. In the winter of 1960 the following participated in caribou hunting expeditions: Itimangniq and young Anaituk, distantly related; Ijirak and Niptajuk, not related; Kajurjuk, Kakiarniut, and Uqarlut, not related; Angutingurniq, Ussuligardjuk, and Kajaksak, the first two only distantly related—Angutingurniq and his first cousin Sigu, both from the same restricted ilagiit, as were Ussuligardjuk and his brother's son Niptajuk. Angutingurniq and Irquvaktuk, not closely related, spent the spring and summer of 1958 inland; the following summer Akkrak, Sigu, and Niptajuk, only the latter two related. Usually, caribou hunting parties, both in winter and summer, draw participants from more than one restricted ilagiit, but no more than two close relatives take part in such expeditions.

Summer canoe-sealing sees to a greater extent the collaboration of restricted ilagiit members. Here, as elsewhere, a large range of variations may again be observable. It was indicated previously that single hunters started alone on such ventures. More often small groupings of kinsmen sealed together, cooperating in the organization of the hunt. The case described previously involved four hunters, all members of the same restricted ilagiit. The small number of outboard motors owned by Pelly Bay Eskimos may account for this relatively large number of sealers participating together. Hunters prefer to operate from a powered canoe instead of a rowboat. With the multiplication of powered canoes in the future, the size of these sealing parties will probably shrink.

In recent times fishing with leisters at the stone weirs did not involve the participation of whole restricted ilagiits. During the summer of 1959 five hunters fished at the saputit. Only two of these were members of the same restricted ilagiit.

With the partial exception of summer sealing, collaborative practices in the field of food acquisition at the level of the restricted ilagiit cannot be observed today. This is an important change in comparison with the traditional hunting patterns of the Netsilik Eskimos, which usually involved the collaboration of whole restricted ilagiits.

Let us examine now whether at present in the domain of food distribution the restricted ilagiit may be considered as an economic unit.

All the evidence points to the very limited character of sharing and food gift-giving among the contemporary Pelly Bay people. With few exceptions today all fish, seals killed with rifles, and caribou are individual property and belong to the successful hunter. This does not apply to boys and some recently married young men who still live in the dwelling of their parents and bring their catch to their mothers as members of the same commensal units. In case of need, however, short circuits of gift-giving appear. When Uugaq returns from the ice-edge he usually gives a piece of seal meat to his father-in-law, Kringhorn, known to be a very poor hunter, who in recent years has neglected hunting. Uugaq and Kajaksak, two adoptive brothers, also exchange gifts of food. The same relationship exists between the following: Tungilik and his sister's husband, Itimangniq; Kanajuk and his married son Angutialik; the two brothers, Apsaktaut and Akkrak. Occasional gift-giving also takes place between Itimangniq and his wife's paternal uncle Attar, and between Anirnilik and his adoptive cousin Kajaksak. Taliriktuk, an elderly blind man, is helped with food by his two brothers, Usuligardjuk and Kutsiutiku. More intimate food gift-giving relationships exist between Kaggutak and his married son, Attar and his married son, Qabvik and his married son-in-law Kakiarniut, and the two brothers Angutingurniq and Inuksak who have common fish caches. In the absence of rigid sharing rules between relatives, usually dyads of closely related individuals within any restricted ilagiit exchange food gifts, in case of need. However, some individuals are known to pull apart from any exchange circuit. Such is the case of Irquvaktuk who prefers to avoid giving and receiving food even from his brother. Also Kanajuk, who shares with his son, is said to be particularly stingy and never gives any food to anybody else. Apsiaktaut, an excellent young hunter, said the following, excluding his brother: "I never share my food with anybody. When I was 13 my father died and we had a very rough time, nobody helped us. Irquvaktuk used to tease me all the time. Now I am doing the same." Visiting Eskimos from adjoining areas were astonished by the 'stinginess' of the Pelly Bay people. Kaggutak, an Aivilikmiô, speaking to Irquvaktuk and referring to the Pelly Bay people in general said: "You are so stingy . . . ." Utuk, a young King William Island Eskimo, said: "The Eskimos here don't share their food. In the beginning, when I arrived here, I didn't believe it; now I do."

This pattern of limited and irregular food sharing between two close relatives does not apply to caribou skins which are in great demand at present. When a young hunter returns from a long inland journey in search of caribou, the summer skins he brings home are usually divided among his closest relatives.

Money and imported goods are never shared outside the household, even between the nearest relatives. Father and son each buy and own their own ammunition. Adults purchase and own individually their clothing. Any member of the household may buy the tea or flour consumed within the commensal unit. Today a large proportion of essential imported goods is acquired with the help of family allowances, often allowing the individual to spend his money on less important items. Whenever a family is badly in need of some necessity, like tea, it is possible for a near-relative to be approached for help. The giver repeatedly asks later for the return of his gift. Kringhorn said: "Yes, sometimes I give tea, but only to people I know very well." Irquvaktuk was presented by a white man with a gallon of gasoline. Immediately his relatives asked and received some: "They used it so foolishly; their lamps were burning all day long. I regretted so much to have given them gasoline. That is why I never like sharing."

It is clear that from the point of view of food-sharing and gift-giving the restricted ilagiit at present cannot be considered as an economic unit. There is a clear tendency to limit food-sharing to the commensal unit comprising usually only a nuclear family. Let us now examine more exactly the size and composition of the commensal units today.

Previously we noted that in traditional times the restricted ilagiit, in summer and sometimes in winter, constituted frequently a commensal unit. Men and women used to eat separately, in small groups. No such phenomenon is to be observed today at the main camp at Kugardjuk, where the commensal unit tends to be co-extensive with the household unit. The nuclear family is the basic commensal unit including the related dependants who happen to live in the same household. Anirnilik, Attaq, Itimangniq, Irquvaktuk, Taliriktuk, and Inuksak, with their wives and children, lived in separate households and formed distinct commensal units. In Kajaksak's igloo lived his father, old Qipingajuk; Qipingajuk thus was a member of Kajaksak's household and commensal unit, as was the old woman Arnakaiar, mother of Tungilik. Whenever a recently married son lives in his father's household he is a part of that commensal unit. Such was the case of young Alakanuaq who after his marriage lived with his father, Sissernaq. Thus, the basic commensal units today tend to include both some elderly relatives and young married sons. After a year or two the latter prefer to establish households of their own.

Another striking feature of contemporary Pelly Bay sharing practices is the way visitors are treated at meal time. Instead of being invited to fully participate in the family meal, they are given a small bite of meat. If the visitor, however, happens to be a relative with whom food gifts are exchanged in period of need, he might be invited to share the meal. The following example is illustrative of the extent to which sharing is avoided: during the single seal hunt at the breathing holes in the winter of 1960, conducted by a dozen sealers, each hunter carried with him his own primus stove, kettle, tea, and food. Each one prepared his tea individually and drank it alone. Moreover, Euro-Canadians are never offered a cup of tea when visiting Eskimo dwellings. Not only was this the case with the writer, but even the local missionary complained that after a stay of 25 years in the community only on very rare occasions was he given tea.

Borrowing of various items today seems to be of minor importance. A few years before Rasmussen's journey in 1923, when only a few rifles were introduced in the area, an idle hunter used to lend his rifle to another man who didn't own one. Today, when each hunter is equipped with firearms, such loans are extremely rare. Canoes are never borrowed (with the exception of the son who may ask permission to borrow his father's craft). Instead, a near-relative may participate in the hunt organized by the canoe's owner. Since wooden sleds are numerous at present among the Pelly Bay people, they are almost never borrowed. Whenever that happens, between near-relatives, the sled has to be returned with a good shoeing. Nets and traps are almost never borrowed.

It is quite clear that in the fields of food acquisition, distribution, and consumption, the restricted ilagiit is no longer an economic unit. This is an important change from traditional times. Gradually, collective hunting, widespread sharing, and eating in groups have disappeared, allowing the nuclear family to emerge as the basic economic unit. Before examining in detail the economic position of the nuclear family, let us first see what organizational changes have affected the winter camp.

The Winter Camp at Kugardjuk

In the section dealing with the winter camp on the flat ice in traditional times, it was pointed out that this camp did not constitute a kinship unit. It was composed of several restricted ilagiits, some closely related, some more distantly related, and some not related. Sometimes most Arviligjarmiut spent the winter together in a single, large winter camp. More often, two winter camps were to be found at Pelly Bay. Furthermore, some restricted ilagiits or nuclear families preferred to leave the area for one or more seasons, while a small group of Eskimos from the Netsilik country or Itsuarturfik moved in temporarily. There was no certainty that the ilagiits camping together one winter would meet again the following winter.

With the establishment of the mission at Kugardjuk, comprising a trading store and a heated room, a powerful centre for the stabilization of these Eskimos appeared. Additional factors were operative in this process, such as lack of suitable fur clothing making travelling by whole families back and forth to the ice-edge and the mission difficult; technological changes and increased individual mobility producing a decrease in ecological pressure and allowing the hunter to settle at a great distance from his hunting ground; repeated epidemics and general fear of sickness causing people to rely frequently on the missionary's medical kit. For several years, with the exception of the two restricted ilagiits mentioned previously, most of the Pelly Bay Eskimos have spent the long winters together, concentrated around the mission, in a large community of about one hundred people. In summer some families are in the habit of leaving the settlement temporarily for a distant sealing camp. In autumn, for a period of two weeks to a month, almost all Pelly Bay people migrate to the fishing grounds along Kellett River. Despite these migrations there is an obvious tendency towards common residence in winter for most Pelly Bay Eskimos.

With the gradual decrease in frequency of relations between Pelly Bay people and outsiders, observed previously, the Arviligjuarmiut today are obliged to look for mates among themselves. In this they are encouraged also by the fact that they are Catholic whereas most of their neighbours are Protestant. Although the development of the cousin-marriage pattern tends to establish distinct kinship units within this community, in fact several recent marriages between different ilagiits took place. Thus Kringhorn's son Alakanuaq married Qarlikittuk from a different ilagiit, and at the death of his wife, Tungilik married Tiriatnaq, a widow from another kinship unit. Thus there is a tendency towards increased consanguinity operating in the community. Anirnilik said: "In the past the ilagiits didn't mix; now they are all mixed up." The Eskimos nevertheless fail to consider themselves as related to most Pelly Bay Eskimos, despite the fact that they may establish genealogical connections in one way or another. They recognize as relatives (ila) only a small group of individuals. There is little doubt, however, that with the present tendency towards group endogamy, the degree of consanguinity of the Pelly Bay people will probably increase with their consciousness of it.

In summary, the Pelly Bay Eskimos, as seen today in the Kugardjuk settlement, show clear trends towards common residence, endogamy, and a higher degree of consanguinity still not explicitly recognized today. There is no other structural form between the nuclear and extended family units and the Pelly Bay–Kugardjuk community as a whole. These are precisely the characteristics of the local group Murdock has called the deme (Murdock, 1949, p. 63). The emergence of a deme type of social organization among the Pelly Bay Eskimos should, however, be considered at present only as a trend and not yet as a fully developed pattern.

Traditionally, the winter camp was an economic unit. The sealers, in order to maximize their chances, had to hunt together at the breathing holes. The product of the hunts was rigorously shared, according to the complex rules described previously. At present, with the disappearance of community hunting at the breathing holes, widespread sharing of seal meat between non-relatives within the framework of the traditional sharing partnerships has been completely abandoned. People do not hunt together any more, nor do they share their food. The introduction of the rifle, by individualizing the hunting technique, has indirectly brought to an end the old community-sharing pattern. Informants are conscious of this. Irquvaktuk said: "Now everybody has a rifle and can go out and get food for himself, there is no need for much sharing."

Occasionally in traditional times the winter camp constituted a commensal unit. This is no longer the case, with the exception of the Christmas community meal. This, however, was organized by the missionary, and he provided both the food and the tea.

Briefly, the Kugardjuk Eskimos today do not engage in any cooperative venture in the fields of food acquisition, distribution, or consumption. The main winter camp at present does not constitute an economic unit in any way whatsoever, except for the fact that these Eskimos trade at the same mission store.

Previously we observed that, traditionally, on certain occasions the winter camp constituted a ceremonial unit. Drum dances in the presence of the whole community were performed in the qagsge. In moments of collective crisis the shaman performed on behalf of the community. In reference to their new religious orientation, the Kugardjuk people may at present be considered as a religious-ceremonial unit. The daily morning mass is well attended, as is the collective evening prayer. On Sundays, when no hunting takes place, the Eskimos spend a good part of the day in the chapel attending a succession of religious services, sermons, prayers, under the leadership of the missionary. The Pelly Bay group exhibits today most of the organizational traits characteristic of a Catholic parish. From the point of view of traditional Eskimo religious beliefs and practices, the winter camp has ceased to function as a ceremonial unit. Drum dancing takes place twice a year, at Christmas and Easter, under the close supervision of the missionary and in conjunction with the Christian ceremonies. It is significant that the missionary owns the only drum in the community, which he lends to the Eskimos on these two occasions. Considering that there are no competent Arviligjuar shamans today and that the shamanistic art is in complete decay, no recent instances of interventions of shamans on behalf of groups of people have been recorded. As far as traditional Eskimo ceremonial is concerned, the contemporary Kugardjuk community does not constitute a ceremonial unit.

The Nuclear Family Today

Here I can only summarize the observations made above. Following a multiplicity of factors, gradually the nuclear family emerges as the basic economic unit among the Pelly Bay Eskimos. The individual hunter, carrying a rifle, travels in winter to the ice-edge and kills the seals necessary to the subsistence of his family. He undertakes distant trips inland, either in summer or winter, to shoot caribou. In autumn he pulls his nets, heavy with arctic char, from under the thin ice along Kellett River. He checks his traps alone and collects the foxes which will provide him with the necessary cash income to buy imported goods. In his acquisitive activities he frequently associates with other hunters. Because of the recent technological changes, these associations are not a necessity as in traditional times and, with the exception of summer sealing, do not lead to cooperative practices.

In the field of food distribution similar tendencies have been observed. There is a general abandonment of the traditional widespread sharing based on precise rules. At the same time there is an obvious effort to keep both locally secured and imported food within the commensal unit which tends today to be co-extensive with the individual family. Thus the nuclear family now tends increasingly to constitute the basic and unique economic unit among the Pelly Bay Eskimos. This is an important organizational change. Traditionally, the nuclear family, especially in winter, tended to form an economic unit. This cell, however was superseded by larger cooperative units: the winter camp on the flat ice, the restricted ilagiit in summer. This is no longer the case. The nuclear family appears increasingly today as economically autonomous.

As the preceding evidence shows, the introduction of the rifle was an important causative factor in this process. The general use of the net operated also in the same way, although this is less obvious. The net undoubtedly was instrumental in decreasing the importance of collective stone weir fishing and thus produced individualizing results. It competed successfully also with leister fishing, an essentially individual technique. Trapping, in its present unsystematic and, we dare say, marginal nature, being an essentially individual activity based on individual ownership of both traps and trapped furbearers, certainly contributed to the increased economic importance of the nuclear family. However, trapping forced the nuclear family to behave as an economic unit in its relations with the trader in the context of the increasing integration of Eskimo economy within the Euro-Canadian exchange system. The individual trapper-hunter brought his pelts to the trader and in exchange obtained various imported goods to be used within the commensal unit. In no direct way, however, can trapping account for the disappearance of the traditional, collective, acquisitive techniques and the sharing patterns that went with them. This was the result of the general use of rifles.

A brief discussion of Arviligjuarmiut socio-economic organization in relation to Professor Julian Steward's concept of levels of socio-cultural integration (Steward, p. 43 ff.) would be appropriate at this point. Steward has consistently associated the Great Basin Shoshoni and the Eskimos (Steward, p. 24, 101) as illustrative of a family level of socio-cultural integration. By 'family' is understood the nuclear family considered as the basic functioning unit of these societies: "families functioned independently in most cultural activities, and the few collective interfamilial pursuits did not serve to give permanent cohesion to extended families, bands, communities . . ." (Steward, p. 119). As far as the traditional Arviligjuarmiut were concerned, the evidence presented here points to the contrary. Without minimizing the functional importance of the nuclear family, it was shown that it behaved as part of an extended grouping, the restricted ilagiit. In the absence of lineages and clans, the restricted ilagiit was not 'permanent,' but it had an organic growth rhythm and followed a developmental cycle of its own. Through the operation of the processes of fission and fusion, some restricted ilagiits slowly died out while others emerged. It could not be otherwise in a society of bilateral descent, or better, to use Lévi-Strauss's term, undifferentiated descent (Lévi-Strauss, p. 135). In the all-important field of economic organization, despite the existence of numerous individual acquisitive techniques, the nuclear family in traditional times both in summer and winter was always associated with a number of other families, and this for rigorous ecological reasons. The success of the two main hunting pursuits, sealing on the breathing holes and caribou hunting from kayaks at the crossing points, depended on the participation of a number of hunters. It was shown that in summer the restricted ilagiit and in winter the whole camp on the flat ice constituted important functional economic units in the two fields of food acquisition and distribution, and occasionally in food consumption. It is thus difficult to speak of the traditional Arviligjuarmiut as characterized by a family level of socio-cultural integration.

Steward's third organization type, the composite hunting band (Steward, p. 143 ff.) also cannot be exactly applied to our data. 'Composite' designates "certain primitive societies which consist of many unrelated nuclear or biological families. These are integrated to form villages or bands of hunters, fishers, gatherers, and simple farmers on the basis of constant association and cooperation rather than on actual or alleged kinship" (Steward, p. 143). This type, by placing emphasis on the unrelatedness of the nuclear family cannot be used for the traditional Pelly Bay Eskimos among whom discrete extended families were functional units. Curiously enough, in the field of economic organization, it seems to fit the conditions prevailing in the winter camp where the economic prerogatives of the restricted ilagiit gave place both to the increased distinctiveness of the nuclear family and to the superior cooperative forms at the winter camp level.

Steward's second organizational type, the patrilineal band, characterized by patrilineality, patrilocality, exogamy, land ownership, and lineage composition, has to be discarded altogether in view of the fact that despite a prevalence of patrilocal norms, no unilineal descent rules existed among the Pelly Bay Eskimos.

The dichotomizing traditional organization of the Pelly Bay Eskimos, together with the existence of extended families, constitutes the core of the difficulties encountered in applying Steward's organizational types to our data. Arviligjuarmiut social life was characterized by a 'piano' summer period (restricted ilagiits travelling alone in the tundra and chasing the migrating caribou, no ceremonial activities) and a 'forte' winter period (large camps on the flat ice, sealing at the breathing holes, group ceremonialism). In both seasons the nuclear family formed a part of larger groupings and was superseded by superior socio-economic units.

The concept of a family level of socio-cultural integration is increasingly applicable to the contemporary situation. It was observed that the introduction of the rifle, together with the development of trapping, produced an atomizing influence among these Eskimos, bringing the nuclear family to the foreground as the only basic economic unit today. Despite the association of most Arviligjuarmiut in a single settlement, the lack of cooperation among families does not make the Kugardjuk camp a collaborative unit. The Pelly Bay Eskimos today show an essentially family level of socio-cultural (or better, socio-economic) integration. The result of this process of lowering of the level of socio-cultural integration among these Eskimos is similar to the facts described by Steward for the Eastern Algonkians: "Among the Canadian Algonkians, the subsistence . . . unit has usually been the bilateral family in historic times" (Steward, p. 145).

The following section contains a description of the 1936 annual cycle of the Arviligjuarmiut. The 1927 migration route illustrated the beginning of the acculturative process at a time when caribou was still abundant and easily killed with rifles. The outline of the 1936 migration cycle, presented below, will invite comparison with the preceding and following cycles and show the gradual character of the local socio-economic changes.

THE RECENT ANNUAL CYCLES

In the following paragraphs the more recent annual cycles of the Pelly Bay Eskimos will be briefly described (*see* Map 3).

Irquvaktuk at the age of 18, and still single, spent the winter of 1936–37 (one year after the establishment of the Catholic mission at Pelly Bay) in the camp at the head of Kangirslukdjuaq Bay (long. 91°25′W., lat. 69° 23′N.). That was the year when Irquvaktuk got his first rifle, and when the first Catholic missionary arrived at Kugardjuk. The hunters were sealing with rifles at the ice-edge northeast of Ross peninsula. This camp was not far from the Irqaluvikjuit stone weir where fish had been stored in stone caches the previous autumn, and for this reason the location of the winter camp was considered particularly good. In spring they moved to Simiutaq Island (long. 91° 4′W., lat. 69° 16′N.) to hunt seals, employing the spring techniques. Sealing there proved unsuccessful, and Qagurtinguk, Irguvaktuk's adoptive father, made only one cache of blubber. When the spring sealing season came to an end, camp was moved to Islurtur Lake, where the men fished intensely with leisters; no nets were available then. Considerable amounts of fish were dried. Irquvaktuk and Kiahiniaq, a young married man, decided to go caribou hunting inland. Since the snow had already melted they did not take sleds; Irquvaktuk was helped by his two pack dogs. First they reached the southern shore of Melville Lake where they caught and dried some fish. Then they walked to Iglulik Lake (long. 92° 15′W., lat. 68° 50′N.) where they parted and hunted caribou alone. Kiahiniaq shot two caribou. There followed a short period of fishing on the southern shores of Lady Melville Lake, since they did not have enough caribou meat to rely on. Soon after, Kiahiniaq returned to the main camp, and Irquvaktuk continued hunting caribou alone east of Lady Melville Lake. He shot five caribou and returned to the Irqaluvikjuit stone weir in the middle of August, at which time the people were getting ready for the autumn uprun of the arctic char. During the summer, when Irquvaktuk was inland, the rest of the hunters were summer sealing in the open sea near the area of Kikirtardjuarardjuk (long. 91° W., lat 69° 30′N.), with the help of a 'jolly boat' imported from the trading posts at Gjøa Haven on King William Island. Few seal caches were made. From the stone weir, camp was moved to Kakulaq (long. 90° 43′W., lat. 69° 24′N.) where during September, sealing from the 'jolly boat' was continued with limited success. The next camping site was at Igliirnat (long. 91° 8′W., lat. 69° 18′N.) for a short period of sealing in open water. At the beginning of October when the tundra became covered with snow and the lakes and rivers began to freeze up, the sleds at Kangirslukdjuaq were secured and the people started on the journey to the Kungurdjuaq narrows (long. 92° 23′W., lat. 69° 16′N.), a fishing place on Lady Melville Lake where large numbers of arctic char were caught with leisters through the thin autumn ice. Later in the autumn the camp moved a little farther north, to Tugakturvik, another particularly narrow point on Lady Melville Lake (narrows were preferred for fishing through the ice because on these points lake currents do not allow the ice to thicken quickly). Around the middle of December the winter camp at Kangirslukdjuaq was again set, and thus the annual cycle was completed.

The essential traits of this migration cycle are the following: As in the 1926 cycle, trapping appears to remain a marginal activity; traps are placed at the distance of a short day's travel from the winter camp. Some entirely new activities appear: summer sealing from canoes, winter sealing at the ice-edge. With the gradual abandonment of breathing-hole sealing there was no need for camping on the flat ice in the central part of the bay, and a locale farther north, near both the ice-edge and the fish caches, was preferred. The effects of the rapid decrease of the resident caribou population and the disruption of the caribou migrations are easily visible in the small number of caribou shot. Only the young hunters are prepared to walk inland in search of summer caribou. In 1926 the whole camp travelled over long distances in search of the then plentiful caribou, but twelve years later the main body of the camp remained in summer near the sea or at the stone weir, a sign that the migration circuit has been considerably shortened following both the changes in game distribution and the introduction of summer and winter sealing with rifles. As a result, the dependence of the Pelly Bay Eskimos on sea mammals has considerably increased.

Most of the traits enumerated are observable today among the Pelly Bay Eskimos. Enough has been said on the Arviligjuarmiut economy in 1960, and it is not necessary to describe the 1960 cycle in detail. Today the majority of the Pelly Bay Eskimos are concentrated around the mission at Kugardjuk. Winter is spent in ice-edge sealing, trapping, and caribou hunting inland, conducted mostly by young men. In spring some restricted ilagiits leave the main settlement to camp near the spring sealing grounds.

The main summer activities are fishing with nets and sealing from canoes, though some young men may decide to spend a few weeks hunting caribou inland. In early October the only mass migration of the year occurs: men, women, and children leave Kugardjuk and travel by canoe or sled to the fishing grounds along Kellett River. In November, winter camp is set at Kugardjuk. The tendency to congregate around the mission for most of the year and the extensive use of fish-nets are the only essentially new traits. Thus the main characteristics of contemporary Pelly Bay economy were already developed at the end of the '30's.

The two preceding chapters were devoted to a description of the basic socio-economic units of Pelly Bay society in traditional and modern times. It was shown that in a former period large economic groupings, characterized by various collective activities and reciprocal exchanges, were common among the Arviligjuarmiut. At the end of the acculturative process—following the introduction of rifle hunting, net fishing, and marginal trapping—these larger units disappeared and gave way to the emergence of the nuclear family as the basic socio-economic unit in all seasons. This organizational change took place within the framework of an economy founded on intensive hunting and fishing and somewhat casual trapping. When these data are compared to similar developments that have occurred among the Northeastern Algonkians (Murphy and Steward, 1956), a striking difference appears. Among the Indians of the Labrador peninsula, the individual family has recently emerged as the basic functioning unit as a result of intensive trapping of furbearers. With the Arviligjuarmiut, a different causal factor, the individualizing tendencies of rifle hunting and net fishing, has produced a similar organizational difference. On the Arctic coast, marginal trapping as a factor of social change is of secondary importance. In order to analyse the impact of intensive trapping on the organization of Eskimo society, it is necessary to present a description of an Eskimo group where trapping is a strategic activity. Only then will it be possible to see whether systematic trapping among the Eskimo has had similar effects upon the organization of society as those analysed by Murphy and Steward.

Within this perspective the Povungnituk Eskimos inhabiting the east coast of Hudson Bay (*see* Map 1) constitute a test case. For this group, at least until a few years ago, trapping of white fox was a highly developed activity. During the past decades, the country of the Puvirniturmiut has suffered a diminution in game availability. These Eskimos had to rely increasingly on imported foodstuffs for their subsistence, and the imported goods had to be paid for with fox pelts; hence the strategic importance of trapping in the area. Interestingly enough, and contrary to all expectations that might arise from Murphy and Steward's interpretations of the Algonkian material, intensive trapping among the Puvirniturmiut failed to determine the emergence of the nuclear family as the only economic unit in all seasons. Certain technological innovations determined the emergence of new collaborative forms leading to the formation of large socio-economic units. This process will be described in the following pages.

CHAPTER FOUR

The Puvirniturmiut, Trappers of East Hudson Bay

The Povungnituk Eskimos inhabit the northwestern coast of Labrador Peninsula, facing Hudson Bay, between the estuary of Kugaluk River and Cape Smith (*see* Map 4). Despite the fact that their country lies 350 miles south of the Arctic Circle, the environment is arctic with a mean daily temperature in January below 10° F and in July below 50° F (Kimble and Good, p. 73, 74). The approximate northern limit of trees extending from Richmond Gulf to Leaf Bay passes 200 miles south of the Povungnituk area. Like Pelly Bay, Povungnituk lies in the arctic tundra biogeographical zone. During the third week of October the sheltered waters of Povungnituk Bay begin to freeze, and a few days later the ice extends into Hudson Bay. The ice-edge is at an approximate distance of twenty miles from the coastline. In the region of Cape Smith, because of sea currents, the ice-edge is much nearer the shore. The sea-ice does not break up until July.

The topography of the Precambrian Shield in this area is marked by numerous low hills and valleys. This ridge-and-valley structure is most characteristic of the Cape Smith Range. The country is covered with innumerable lakes and streams. Several large rivers empty their waters into Hudson Bay. Their estuaries are the preferred camp-sites of the Eskimos.

CHANGES IN GAME DISTRIBUTION

Of all animal species inhabiting Western Ungava, the barren-ground caribou has suffered the most extensive changes in distribution during the first half of this century. In his scholarly work, C. Elton has assembled all the evidence pertaining to the subject up to 1942 (Elton, Chap. XVII, XVIII). He accepts A. P. Low's basic assumption about the division of the Labrador peninsula caribou into three discrete herds (Low, 1895, p. 319). The Western herd travelled up and down along the Hudson Bay Coast; the Central herd occupied the centre of the great peninsula; and the Eastern herd was located in the area of the upper George River and the Atlantic Range. A different Indian band followed each of these herds. Referring to the movements of the Western herd, Low writes: "[it] passes northward from the vicinity of Richmond Gulf and Clearwater Lake, and summers along the highlands of the northeast coast of Hudson Bay" (*Ibid.*). This herd probably wintered in the large sparsely wooded area immediately south of the treeline (called 'région hémiarctique' or forest tundra by Dr. Jacques Rousseau, 1949) and migrated northward in early spring. F. F. Payne, writing at Stupart's Bay in Hudson Strait in 1885–6, mentions the arrival of the caribou in the area: "Only a summer visitor to the coast, arriving in the early part of April, and leaving again for the interior in November" (Payne, 1889).

There is no reliable evidence of the route followed by the migrating Western herd. During the summer of 1898, while in the area of Cape Wolstenholme, A. P. Low writes: "The Eskimos killed two reindeer and report these animals abundant everywhere in the neighbourhood and along the coast for a good distance to the southward, after which they are found abundantly only after a day's walk or more from the coast" (A. P. Low, 1900, p. 20D). Low does not indicate at what area south this takes place. A few days later, during the second half of August of the same summer he found evidence of the Eskimos from Kovik Bay, Kettlestone Bay, and Povungnituk having migrated inland for the caribou hunts. One may presume that during this period caribou were not found immediately near the coast of northeastern Hudson Bay, south of Kovik Bay. A survey of the location of stone cairns in the area, where traditional collective hunts were conducted in the past, may reveal some indication of the probable migration route of the herds and its distance from the sea-coast. Qinujrak, an elderly Eskimo who spent his youth in and around Kovik Bay, indicated the areas long. 77° 33′W., lat. 61° 38′N. and long. 77° 33′W., lat. 61° 17′N., both about ten miles from the coast, as the places where in the past collective hunts along stone cairns took place. Farther south the point where Povungnituk River flows into Povungnituk Lake (long. 76° 56′W., lat. 60° 05′N.) is littered with stone cairns and meat caches. According to local informants, this was formerly a locale of great caribou hunts. The point is 25 miles west of the sealing grounds of Cape Anderson. It is possible to conclude, however, that prior to the beginning of this century, caribou herds were to be found relatively close to the coast of northeastern Hudson Bay. Concerning the numerical importance of the Western herd, prior to the generalized use of the rifle in the area, A. W. F. Banfield estimates it at over 100,000 individuals (pers. comm.). This remains a speculative estimate based mostly on the size of the area and the local caribou food resources.

The fate in recent years of this huge herd is well known. Summarizing the literature, Elton found evidence for the diminution of the herd at the end of the last century: "The general drift of this evidence points to diminishing numbers in the last twenty-five years of the nineteenth century and great scarcity in later years" (Elton, p. 368). This decrease in numbers continued at a great pace during the last fifty years. The results of an aerial and ground survey conducted in 1954 and 1956 by A. W. F. Banfield and a number of collaborators indicated that the Western herd at that period averaged about 250 individuals only (Banfield, 1958, p. 564). Needless to say, the almost total disappearance of caribou in Western Ungava affected profoundly the subsistence and settlement patterns of the Eskimos along the northeast coast of Hudson Bay.

Several factors operating at the same time have contributed to this result. The acquisition of repeating rifles by the natives was by far the most important of these factors. After examining certain smaller fluctuations "caused by erratic movement," Elton comments on the gradual decline in the numbers of Ungava caribou: "The acquisition of firearms by natives, combined with the heavy commissariat of the trading post, must have played a dominant part. Rifles have increased terrifically the speed and range of native killing power . . . . Guns the natives had for over a hundred years, but the modern repeating rifle came on the scene during the later period of decline" (Elton, p. 384). This author lists a few additional factors: climatic changes, fear of man with his new explosive noises, forest fires, disease, or the difficulties of recreating herd traditions that have once been smashed (Elton, p. 386). Banfield also recognizes the rifle as an important factor in the decline (Banfield, 1958, p. 572), as does Rousseau (1950, p. 11).

In 1958 Eskimo informants considered that some of the small remnants of the once huge Western herd now roam the inland country in small groups of a dozen individuals or less in the very heart of Western Ungava, in the tundra between Payne Lake and Leaf River.

* * *

There is an astonishing paucity of published information on the past and present ringed seal population of northeastern Hudson Bay. T. H. Manning, who travelled along the coast and visited the Ottawa Islands in the summer of 1944, summarizes his observations on the ringed seal: "This is the common seal in the region. . . . Occasional seals of this species were seen all along the coast, around the islands, and at sea between the island groups" (Manning, 1946, p. 84). Eskimo informants considered the waters around Smith Island particularly rich in seals; spring sealing was said to be very profitable at Pitiktanravik Island (long. 77° 46′W., lat. 60° 12′N.), Cape Anderson (long 77° 39′W., lat. 60° 04′N.), Kupak Island (long. 77° 47′W., lat. 60°N.), Kagagalalik point (long. 77° 20′W., lat. 59° 58′N.) and Millirk Island (long. 78° 30′W., lat. 59° 18′N.). Comparing the availability of ringed seals along the complex coast of southwest Baffin Island (Cape Dorset camps) and the Povungnituk area, the local trader considered the former region much richer in this common seal species. Around Cape Dorset, the summer canoe sealers need not chase individual seals with their craft. This is not the case at Povungnituk. This difference is borne out by the data on the availability of ringed seals in the Eastern Arctic assembled by I. A. MacLaren. His summer and winter ringed seals availability indexes for southwestern Baffin Island are respectively 18.2 and 14.5, in contrast to 10.1 and 6.6 for the coast between Cape Smith and Portland Promontory (MacLaren, p. 28–31). In the Povungnituk area spring is the best season for sealing: "It is indeed a fact that in areas of low seal availability, the most profitable hunting may be carried out on the spring ice when the population, both young and old, is concentrated in a relatively small area" (MacLaren, p. 42). In winter, wind conditions may render sealing difficult: "Along the east coast of Hudson Bay the Eskimos are troubled by prevailing northwest winds in winter, and often have to travel out on the consolidated pack to hunt. . ." (MacLaren, p. 51).

There is no evidence of any substantial decrease of the seal population in the Povungnituk region. For the coastal area from Cape Smith to Portland Promontory, MacLaren considers the number of 2,080 seals as the maximum sustainable yield at 8 per cent utilization. Unfortunately no data is available on the total annual catch of the Eskimos living in that area that will include the very important loss of seals through sinking. The situation is very similar to the one observed by M. J. Dunbar in Ungava Bay:

> It is not clear whether there has actually been a decline in the sea mammal population of Ungava Bay . . . If any reduction in the sea mammal population has taken place, it is most probably the result of the use of the rifle by the Eskimo, and of the coarsening of the native hunting skill. Such a waste of a natural resource (sinking of seals) . . . has been going on for years in the north, every summer. It has led to the natural conclusion that the seal population must be declining. It may be, but we have no proof of it (Dunbar, p. 9).

According to Eskimo informants, bearded seals may be found occasionally anywhere along the coast. This is confirmed by T. H. Manning (1956, p. 84). The waters near the northern shore of Smith Island were considered a good area for this highly valued sea mammal, which is much less abundant than the ringed seal. MacLaren states that the east coast of Hudson Bay with the shallow waters this animal prefers is one of the best feeding grounds of the bearded seal (MacLaren, p. 54).

Surveying the distribution of the white whale (*Delphinapterus leucas*) in the Eastern Arctic, R. M. Anderson notes its relative abundance in Hudson Bay where it enters bays in large schools (Anderson, p. 73). This determined the Hudson's Bay Company to conduct white whale fisheries with nets at Great and Little Whale rivers during the last century (Low, 1906, p. 274). T. H. Manning, after noting the presence of about 150 white whales in the mouth of Nastapoka River on August 15, 1944, writes: "According to Mr. L. Bradbury, post manager at Povungnituk, over a hundred whales had been killed in a most successful drive near that post" (Manning, 1946, p. 84). Eskimo informants considered the following locales as good whaling areas in summer: a narrow bay on the southern shore of Smith Island (long. 78° 20′W., lat. 60° 46′N.), Korak Bay, Niakungut Bay, Thomson Harbour, Povungnituk Bay, the coast around (long. 77° 20′W., lat. 59° 48′N.), the mouths of Kugaluk River and Tukdjukatak River (long. 77° 45′W., lat. 59° 33′N.). All these areas are visited by the Eskimos in summer in search of white whales. On July 10, 1958, a large catch was made in Povungnituk Bay itself. That was the first time in six years that a school of white whales had entered the bay. The whaling season usually starts in the middle of July and lasts until the end of August.

Surveying the distribution of the Atlantic walrus (*Odobaenus rosmarus*) in East Hudson Bay, A. G. Loughrey comments: "They (walruses) are still found, although, apparently in reduced numbers, in the vicinity of the Belchers, King George, Sleeper and Ottawa Islands . . . . It is not certain but seems likely that they winter in the open water leads around the chain of islands from the Ottawas to the Belchers. Apparently they have never been recorded from Mansel Island" (Loughrey, p. 17). The Povungnituk Eskimos regularly hunt walruses near these islands in Hudson Bay; some even visit Nottingham Island in Hudson Strait where many bulls are to be found in autumn. Qinujrak, an elderly Eskimo, stated that his father used to hunt near Cape Smith from a kayak, with a heavy harpoon and a large float. No walruses are to be found today in the Cape Smith area. T. H. Manning reports a recent diminution of walruses on the Sleeper Islands, probably as a result of intensive hunting by a group of Eskimos who camped on the islands for a number of years (Manning, 1956, p. 84). Referring to any changes in walrus distribution on the offshore chain of islands from the Belchers to the Ottawas, Loughrey concludes: "To date most of the evidence indicates that the walrus herd of the islands is more or less resident and is augmented by an influx from Hudson Strait. It also appears from the information that the herd has maintained itself in the face of continuous although variable hunting pressure over the years" (Loughrey, p. 70).

* * *

Several species of fish abound at certain seasons at many coastal points, rivers, and lakes in the Povungnituk region. Arctic char is considered particularly abundant at Kovik Bay, Knight Harbour (more particularly the narrows between Kigirtaluk Island, long. 78° 6′W., lat. 60° 47′N. and the mainland), Povungnituk Bay, Utakivik Bay (long. 77° 15′W., lat. 59° 59′N.), and the mouths of Kugaluk and Tukdjukatak rivers. The peak of the downrun phase occurs at the end of June, and the most intensive fishing during the uprun period takes place during the end of August and the beginning of September.

White fish, caught by net only, may be found in many large lakes: Tasirquarusik Lake (long. 76°50′W., lat. 60° 40′N.), the northwestern part of Povungnituk Lake, Tunusualuk Lake (long. 76° 30′W., lat. 59° 45′N.), Kugaluk Lake near the estuary of the river bearing the same name, two lakes near the mouth of Tukdjukatak River (long. 77° 30′W., lat. 59° 30′N. and long. 77° 35′W., lat. 59° 27′N.), and further inland, Ihalurakpik Lake (long. 75° 36′W., lat. 60° 48′N.), and Lakes Duquet and Couture.

Cod is available in winter at many points along the coast. Considerable numbers are caught by the Eskimos mostly for dog feed. A favourable place for jigging is at Povungnituk Bay at long. 77° 21′W.

Many other species of fishes are known to the Eskimos, but since they are not an important part of their diet, no comments are necessary.

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Contrary to what we observed among the Pelly Bay Eskimos, birds are abundant along northeastern Hudson Bay and play an important part in the native economy. Canada geese (*Branta canadensis*) breed at certain lakes where they return year after year. These lakes are regularly visited by the Eskimo. Among the well-known Canada geese breeding grounds are the following: the lower stream of Sorehead River near to Niakungut Bay, a small lake at long. 77° 08′W., lat. 60° 3′N., Nidlukadlak Lake (long. 76° 54′W., lat. 60° 5′N.), Kugaluk Lake, and the ramified lake on the lower stream of Tukdjukatak River.

The Eider, a sea-diving duck, is hunted in many localities along the coast. Here are some of the Eider duck hunting grounds: around the two small islands lying immediately north of the narrows separating Smith Island from the mainland and called Pikiuluk Island (long. 78° 13′W., lat. 60° 51′N.) and Uiguksik Island (long. 78° 13′W., lat. 60° 49′N.); Kigirtak Island (long. 78° 43′W., lat. 60° 45′N.) and the group of small islands in the northern part of Mosquito Bay; Siklaruk Island (long. 77° 52′W., lat. 60° 45′N.), and the adjoining group of very small islands near Niakungut Bay; the islands in Thompson Harbour and Magnet Island, farther north; the bay at long. 77° 23′W., lat. 59° 50′N., and the coast between latitudes 59° 26′N. and 59° 29′N.

Ptarmigan are said to be abundant in the Povungnituk area. Along the lower portion of Tukdjukatak River and around the country immediately to the southwest of Povungnituk Lake, ptarmigan are considered to be particularly numerous.

The Eskimo collects the eggs of the sea-pigeon (Mandt's Guillemot) on the many rocky islands which this species seems to favour. Among the well-known sea-pigeon nesting grounds are Kupak Island (long. 77° 46′W., lat. 60° 1′N.), the group of tiny islands immediately north of Reef Point, Ivuniq Island (long. 78° 5′W., lat. 59° 25′N.), and Kingituaruk Island (long. 78° 30′W., lat. 59° 19′N.).

The Povungnituk Eskimos are acquainted with numerous other species of birds hunted occasionally, but the above-mentioned four species seem to be among the most important in the native economy.

* * *

Furbearers play an essential part in the economy of the Povungnituk Eskimos. Most important among these is the arctic fox. The numbers of this animal follow a four-year periodicity. " . . . it is known that the Arctic Fox has a period of abundance about every four years, coinciding approximately with the abundance of lemmings, which form a large part of the food of the foxes" (Anderson, p. 85; for a scholarly analysis of the fox cycle in Ungava, *see* Elton, Chap. XX, XXI). Certain regions, however, appear to be particularly rich in foxes; the Povungnituk Eskimos indicated the following fox-trapping grounds as the best in the country: the coastal region southeast of Korak Bay, the areas around long. 76° 50′W., lat. 60° 45′N., and long. 76° 20′W., lat. 60° 40′N., and the country around Payne Lake. On the whole the hinterland lying east of the coast between Smith Island and Portland Promontory is considered a rich fox-trapping area. This partly accounts for the local development of an intricate system of trapping which will be described in detail in this chapter. Besides fox, some mink and otter are trapped in the Payne Lake area. These species, however, are of minor economic importance.

CHANGES IN TECHNOLOGY, ECONOMY, AND ECOLOGIC ADAPTATION OF THE POVUNGNITUK ESKIMOS

T. H. Manning (1947, p. 58, 65), A. P. Low (1895, p. 7L–19L), J. J. Honigmann (1961, p. 11–19), and A. Balikci (1961*b*, p. 65–74) have described the history of explorations of various eastern Hudson Bay areas during the 18th and 19th centuries. There can be little doubt that some of the Eskimos from northeastern Hudson Bay did establish contact with the trading posts at Fort Chimo or Little Whale River during the second half of the last century. The Fort Chimo post was built in 1830 near the mouth of Koksoak River in Ungava Bay, abandoned in 1842 through lack of trade and reopened in 1866 (Voorhis, p. 52). The histories of the Little and Great Whale River posts appear somewhat confused. White lists evidence on the existence of the Great Whale River post at various periods during the second half of the 18th century and the first half of the 19th (White, p. 20). Prior to 1895 this post seems to have been in operation at irregular periods. The Little Whale River Post was in operation in 1857 (White, p. 30) until transferred to Great Whale River in 1895 (Honigmann, 1952, p. 510). On the northeastern side of Hudson Bay, trading centres were built at a much later period: "The first of these posts were established by Révillon Frères at Port Harrison in 1909 and at Povungnituk in 1910. In 1909 the Hudson's Bay Company opened a post in Eric Cove near Cape Wolstenholme, after which it was named, and in 1920 and 1921 they established posts alongside those of the Révillon Frères at Harrison and Povungnituk" (Manning, 1947, p. 63). Considering that the Povungnituk Eskimos felt the effects of the fur trade at a very early period and taking into account the lack of any detailed ethnographic accounts of their traditional culture, the following reconstructive sketch of the Puvirniturmiut's ancient ways will be very fragmentary.

Lucien M. Turner describes three main Eskimo 'tribes' as inhabiting the shores of Ungava Peninsula: the Suhinimyut, along the southern part of Ungava Bay; the Tahagmyut, west of Leaf River and on the south side of Hudson Strait; and the Itivimyut (Itivuk signifying the other, farther, distant side of a portion of land), along the east side of Hudson Bay (Turner, 1888, p. 99–105; 1894, p. 175, 180; also Hawkes, p. 23). Turner considers the north side of Mosquito Bay as the dividing line between the Tahagmyut to the north and the southern Itivimyut (Turner, 1888, p. 101). Referring to the number of Eskimos inhabiting the area, A. P. Low quotes the clerk at Fort Chimo in 1892 who considered the coast from Cape Wolstenholme to Great Whale River to be inhabited by eighty Eskimo families, adding: "the average Eskimo family is small and rarely exceeds five persons" (Low, 1895, p. 42L).

The Traditional Situation

The Itivimyut were acquainted with several sealing techniques. A. P. Low, who in his book *The Cruise of the Neptune* has summarized the results of his observations among the eastern Hudson Bay Eskimos at the end of the last century, describes in detail the breathing hole sealing technique of the Itivimyut. At that period this took place with iron-tipped harpoons only and did not involve the use of indicators. The arrival of the seal is indicated by "strings of bubbles formed by the animal emptying its lungs as it rises to the hole" (Low, 1906, p. 150). This gives the signal for the strike. Breathing-hole sealing among the Itivimyut appears to be a less developed technique than that practised among the Netsilingmiut. January, February, and March are the best months for hunting at the breathing holes.

F. F. Payne describes a peculiar sealing technique of the Cape Prince of Wales Eskimos on the southern side of Hudson Strait: "... seals were seldom captured at their holes in the ice, but invariably along wide cracks, or in the water beyond the ice where one man might be often seen scraping with his spear and whistling in a low note while his companion lay at the edge of the ice, and if there were any seals within hearing distance they were always attracted to the spot, when rising quickly the Eskimo would throw his spear with line attached and if quick enough would seldom miss" (Payne, 1889, p. 218). It is possible that this technique was practised traditionally in the Cape Smith area where cracks in the sea-ice are numerous; today numerous seals are caught along these cracks, with rifles of course.

In spring when the weather becomes warmer and the seals emerge from their breathing holes to lie on the ice basking in the sun, a different sealing method is employed. The hunter crawls near the sleeping seal, imitating with his arms and legs the motions of a seal; when sufficiently near, he kills the seal with his lance (Low, 1906, p. 153). Qinujrak, an elderly Eskimo who in his youth had land at Kovik Bay, reproduced the particular type of harpoon used in spring sealing. This harpoon, called aktuutik, is about 2.20 metres in length and is made from several pieces of driftwood held together by ivory rivets and sealskin thongs. These pieces are flat, 5 cm wide and 2 cm high, and the front section is slightly curved upwards, and into it is driven a short (8 cm), round shaft of caribou antler which supports the iron pointed harpoon head. A short sealskin thong firmly attached to the harpoon holds the harpoon head to the shaft. The hunter approaches his prey in the above-described manner and when sufficiently near throws the harpoon, sliding it along the flat ice. A similar sliding harpoon, fastened to a small sledge (Porsild, p. 134), was formerly used in Greenland.

In summer, when the bays are free of ice, still another sealing method is employed, sealing from kayaks. A shorter harpoon with a strong wooden handle, a long ivory shaft, and an iron-tipped ivory head is used. "The harpoon is thrown at the seal, walrus, or whale, and its weight is sufficient to drive the head completely through the skin" (Low, 1906, p. 158). The sealskin float is thrown overboard, and when the seal comes to the surface, it is speared with the killing lance. As pointed out by Low, the technique for hunting seals and white whales in summer is essentially similar; when the latter enter the narrow bays, an effort is made by the kayakers to frighten them by making noise, to push them to shallow waters at the mouths of the rivers, and there to harpoon them more easily.

For good results, breathing-hole sealing necessitates a number of harpooners controlling numerous breathing holes, and therefore one may consider this method a group technique; spring and summer sealing remains essentially individual, without the necessity of any cooperative effort. This is not the case, however, with white whale hunting. White whales travel in schools, and several kayakers driving them to shallow waters could make a larger kill. There is no information available on the organizational aspects of this kind of hunt.

Prior to the introduction of guns in western Ungava, the Itivimyut employed two major caribou hunting techniques. Referring to the Povungnituk Eskimos, A. P. Low describes their caribou hunts: "This they do by spearing them [the caribou] in the water while crossing the narrows of long lakes, or feeding places in the rivers" (Low, 1900, p. 12D). This collective technique from kayaks is very similar to the one practised by the Netsilingmiut and already described by numerous authors, including the excellent account of Turner referring to the Koksoagmyut near Fort Chimo (Turner, 1894, p. 249).

Qinujrak gave the following description of a caribou drive he observed as a child at the end of the last century near Kovik Bay. This took place with bows and arrows in front of a long line of stone cairns. As soon as a herd was spotted along the caribou migration route, the beaters, mainly women and boys, tried to drive the frightened animals toward the single line of cairns. Behind these, the hunters, armed with wooden bows, lay in ambush. When sufficiently near, the caribou were greeted with a volley of arrows. The whole camp participated in these hunts which often accounted for large kills, up to forty animals during a single drive. A similar technique has been described by Birket-Smith for the Caribou Eskimo (Birket-Smith, 1929, p. 111), and Boas for the Baffin Islanders (Boas, p. 501). It should be noted that the single Netsilik hunter usually employed the bow for stalking caribou behind a small taalun, but bow hunting among the Itivimyut was mainly a collective activity, in autumn, involving the extensive cooperation of beaters.

* * *

Waterfowl were hunted in early and later summer with the help of the bird dart, launched with the throwing board. A model made by Qinujrak at Povungnituk has a wooden shaft 1.45 metres long with a set of three double-barbed antler points in the middle and a single point at the tip. The throwing board is similar to the one collected by Hawkes at Cape Wolstenholme (Hawkes, fig. 20, p. 78). There is no evidence that the Itivimyut ever used whalebone nooses for catching waterfowl. Such snares were employed along the southern side of Hudson Strait and on Baffin Island (Boas, p. 511). During the month of July, when the young Canada geese were growing fat and still unable to fly, they became easy prey to the fast kayakers. A special long-shafted bird spear, tipped with a single double-barbed point, was then used. Needless to say, egg collecting in spring was sometimes a profitable activity.

The well-known double-pronged leister was widely used for fishing. In late spring and autumn, during the arctic char migration, substantial amounts of this fish were cached at the stone weirs. During the inland migrations, 'sleeping hooks' (similar to the *lignes dormantes* of the *coureurs des bois*), made of caribou antler, were thrown into the lakes and left there overnight, caribou meat being used for bait. The large lake trout was caught in that manner. In early winter, holes were dug through the lake ice, and the trout were attracted with fish lures and speared with the leister. Bone hooks were also used in fishing for cod in early winter at the opening of the bays.

In late summer, quantities of berries were collected. These were eaten mixed with seal oil. Among the more widely utilized berries were the following: black crowberry, mountain crowberry, bilberry, alpine bearberry. In periods of starvation numerous plants were eaten: the green parts of the lyme-grass, the large-flowered wintergreen, the stem of the creeping willow, the mountain sorrel, the white stem of the moss pink, and at least three species of seaweeds.

* * *

In the following paragraphs a brief reconstruction of the Itivimyut annual cycle will be outlined. The preferred camping areas of the traditional Itivimyut were at Kovik Bay, Smith Island, Povungnituk Bay, and the estuary of Kugaluk River. The winter was spent on the solid ice, in snowhouses. The hunters were busy sealing at the breathing holes with the winter harpoons or along the cracks in the sea-ice. In the better years, some cached caribou meat supplemented the usual seal meat. In the spring the camp is moved to the seashore, the sealskin tent replacing the snowhouse. Cape Smith, Cape Anderson for the Povungnituk area, and the outer part of Reef Bay for the Kugaluk region were considered good spring camping sites. With the seals coming out in the sun to lie on the ice, intensive sealing is practised with the sliding harpoon. It is probable that some caribou hunting with bows and arrows must have taken place in spring, in conjunction with the northward migration of the herds not far from the coast. With the sea free of ice, summer sealing and whaling takes place from kayaks. Waterfowl are killed in large numbers. In late summer the time for caribou hunting arrives.

> As the middle of August approaches, the natives who have been living on the coast, and who have generally secured several sealskins full of porpoise or seal oil for the next winter's use, start inland for the annual deer hunt, only leaving behind the old people who cannot tramp long distances. These pick up a living during the absence of the younger people by fishing and hunting birds . . . Going to the hunting grounds the course of some river is generally followed, the men travelling in their kayaks, while the women, children and dogs all carry heavy loads overland. The early autumn is spent on the deer grounds, and a return to the coast is not made until sufficient snow has fallen to allow the use of the dog sleds (Low, 1906, p. 159).

In early autumn the arctic char is speared at the stone weirs and lake trout are caught with 'sleeping hooks.' After the freeze-up, camp is moved again onto the firm ice.

This cycle reveals an essentially sea adaptation. Contrary to what was observed among the Pelly Bay people, the Itivimyut spend not only the winter but a good part of the summer near the sea, hunting sea mammals. The only long inland migration takes place in late summer, and probably not too far inland when one considers that the caribou herds usually move along the coast. Furthermore, this inland migration involved all able-bodied individuals and children. It seems that traditionally long journeys made by single hunters were not frequent. Sealing in all seasons and caribou hunting in early autumn took place not far from the camp. The introduction of the gun and trapping with steel traps changed profoundly the annual cycle and the settlement patterns of the Itivimyut. These transformations will be described below.

The Post-Traditional Situation: Hunting with Guns and Marginal Trapping

There is substantial evidence that long before the end of the last century the Itivimyut came under the influence of the traders. Peck writes of an

Eskimo visiting the Little Whale River post in 1881 and returning to his hunting grounds situated about eight hundred miles north from there (Lewis, p. 139). The distance is obviously inaccurate, but it is probable that Peck refers to some of the northern Itivimyut. Turner, who wintered at Fort Chimo in the early 1880's, referred to the Itivimyut: "The number of these Innuit could not be definitely ascertained, as they trade, for the most part, at Fort George, belonging to the Moose district. Each year, however, a party of less than a dozen individuals journey to Fort Chimo for the purpose of bartering furs and other valuables" (Turner, 1894, p. 179; 1888, p. 100). A. P. Low, summarizing his observations of 1898–99 along the East coast of Hudson Bay, notes that in January the Eskimos had already started on their lengthy journey to the trading post, presumably Great Whale River (Low, 1906, p. 141, 152). They returned in early spring. Elton quotes the Report for Outfit 1896 of the Great Whale River factor: "A large number of Northern and inland Esquimo visited the place in spring and brought fairly good hunts of deerskin" (Elton, p. 366). The evidence points to the fact that prior to the end of the century the northern Itivimyut established regular contact with the trading posts. Most of them were probably attracted by the Little or Great Whale River establishments, but a small number of hunters used to cross Ungava Peninsula and trade at Fort Chimo. By bartering their pelts, mostly fox and caribou, they obtained various imported goods: tobacco, molasses, tea, biscuits, hardware, steel traps, and, most important, muzzle-loading guns with powder and shot. The general use of guns among the northern Itivimyut introduced profound changes in their hunting techniques. These transformations will be described below.

As was the case with the Pelly Bay Eskimos, following the introduction of the gun, breathing-hole sealing was gradually abandoned for the easier technique of ice-edge hunting. This had already begun to take place at the end of the last century (Low, 1906, p. 141). Among the contemporary Povungnituk Eskimos at present, only the elderly men remember having hunted at the breathing holes. During spring sealing, the sliding harpoon which fell into disuse was replaced by the rifle behind a white screen. In summer, until the middle of this century, kayaks were frequently used by the hunters armed with rifles. The sea mammals are first shot and then harpooned. With the introduction of canvas freight canoes, usually powered by outboard motors, several hunters cooperate on the hunt. The collaboration that takes place on board between hunters, pilot, and engine operator is similar to the summer sealing pattern already described for the Pelly Bay Eskimos. Considering that seals are less abundant in the Povungnituk area than in Pelly Bay, individual seals are chased, and the canoe is constantly kept moving. White whales are killed essentially in the same way. Shots are fired at them, and when wounded they are rapidly harpooned. When a school of white whales enters a bay, all available craft are used, and a repeating drum fire is kept up at them. No organized attempt is made to drive the white whales into shallow waters and recover them in numbers at low tide. When travelling in Peterhead boats, a watch is kept for any sea mammals that might come around. These are shot at frequently, but they are very difficult to recover since these large boats are slow, and seals sink quickly (for a detailed description of sea-mammal hunting among the contemporary Eskimos of the Eastern Arctic, *see* Manning 1944, p. 140, 145).

In summary, the use of guns and later of repeating rifles produced the same individualizing effects in winter sealing as were noticed among the Pelly Bay Eskimos. Spring sealing was and remained an individual activity. Summer sealing gave rise to cooperative endeavours only when canvas canoes were introduced in the area. However, with these canoes becoming increasingly numerous and each hunter owning his canoe, hunting parties tend to become smaller, and two individuals (brothers or father and son) now constitute the optimum unit.

With the introduction of guns, caribou hunting became greatly simplified. Very quickly the collective caribou drives were abandoned, and bows and arrows were used only to hunt ptarmigan. Today only one elderly man at Povungnituk remembers having seen a caribou drive east of Kovik Bay at the turn of the century. Firearms gave the Eskimos much better control over the caribou. With guns the Eskimos could kill scores of caribou anywhere and not only along the migration routes. Nor were they limited in caribou hunting to certain seasons only. In winter, spring, summer, and autumn, whenever resident or migratory caribou were to be found, they became easy prey to the Eskimo armed with a gun. The individualizing effects of caribou hunting among the Puvirniturmiut are very similar to those described among the Pelly Bay Eskimos.

The acquisition of shotguns and .22 rifles by the Eskimos stimulated waterfowl hunting. The bird dart disappeared from the Povungnituk region at the beginning of this century, and today only two Eskimos remember having seen it in use in Ivugivik and near Kugaluk Lake. Large numbers of birds are shot today in the area, and it is not infrequent for a small party of hunters to get a canoeload of ducks and geese.

Nets were introduced in the area before the end of the century (Low, 1900, p. 22D). They assured the Eskimos of a more regular supply of arctic char and enabled them to catch the whitefish which abound in the lakes. The adoption of individually-owned nets resulted in the abandonment of the collectively-operated stone weirs. The leister, however, continued to be used in early winter for fishing through the lake-ice and in autumn in shallow waters along the streams. The introduction of special steel hooks greatly eased fishing through the sea-ice for cod.

Briefly, the introduction of firearms and nets in the Povungnituk area produced the same individualizing and simplifying effects that were previously described as taking place among the Pelly Bay Eskimos. For a time, as long as caribou were plentiful, the use of guns resulted in greatly increased game returns. Groups of Eskimos were not afraid of spending prolonged periods inland in search of caribou. Soon after the turn of the century the herds rapidly diminished, and new sources of subsistence had to be found. Fox trapping grew more and more profitable since it enabled the Eskimos to buy imported foodstuffs. This essential activity will be described below in relation to the changes in ecological adaptation that occurred among the Povungnituk Eskimo during the last fifty years.

* * *

Low has described the annual cycle of the Eskimo of east Hudson Bay at the end of the last century (Low, 1906, p. 141, 161). At that period the northern Itivimyut had already established contact with the Great Whale River trading post. The beginning of each year sees the Eskimos with their families travelling on the sea-ice south towards the trading post. The groups apparently carry few supplies with them and tend to rely on ice-edge sealing with rifles. "The annual journey is made in stages; the native remains in a suitable spot for killing seals until enough of these animals have been secured to meet the requirements of food for the family and dogs, for a few days; then everything is securely lashed on the long, narrow sleds, and the party, usually consisting of two or more families, travels slowly southward along the shore ice, a woman often walking ahead of the dogs to encourage them" (Low, 1906, p. 142). As soon as camp is set, steel traps are placed for foxes, presumably in the vicinity of the igloos. Evidently there are no established trap-lines. Trapping appears as a secondary activity during the journey. Low continues: "The months of January and February are passed by the Eskimos on the journey to the trading post, where a short stay of a few days is made to dry the fox skins caught during the winter, and to trade these along with deer and other skins in the shop" (Low, 1906, p. 152). The Eskimos trade first for tobacco and ammunition, and then for tools, hardware, and other items. "The trading completed, the natives collect in large bands on the ice, usually in the vicinity of some long crack or other place where seals are abundant, and spend the next month going from encampment to encampment visiting friends and exchanging the news. With the first signs of mild weather a start is made northward" (*ibid.*). During the return journey northward seals are killed while basking in the sun, with the help of a gun and a white screen. The traditional hunting grounds of the group are reached probably before the end of May. Low mentions that in May the few families who intend to pass the summer inland leave the coast and hurry to their destination before the sun melts the snow. In June, ducks and geese are hunted by the coastal groups, and caribou coming to the coast at this season are killed with guns. In late June the bays become free of ice, and sealing from kayaks with guns becomes a major activity. White whales are also hunted, as previously described. In the middle of August the coastal groups, having cached some seal oil, start on their annual inland migration to intercept the caribou herds on their southbound movements. Caribou hunting at that period must have been carried on with guns. "The early autumn is spent on the deer grounds and a return to the coast is not made until sufficient snow has fallen to allow the use of the dog sleds" (*ibid.*, p. 159).

Certain marked innovations characterize this cycle. The gun is used in sealing and caribou hunting, progressively replacing traditional technologies. Trapping is still undeveloped, being conducted with a small number of traps set at a short distance from camp. There are no trap-lines. A new type of migration takes place, that is, the long winter journey to the trading post. There, the Eskimo barter pelts for necessities, attend religious services conducted by the missionary, and meet other Eskimos from many distant areas. In late summer and autumn the traditional pattern of migrating inland with wives and children on the caribou hunts is still followed. Low mentions, however, that certain families spend the whole of the summer inland. This point needs elaboration.

Inukpak, an elderly informant who has travelled widely along the shores of Ungava peninsula, said that when he was very young (the first decade of our century), his family (consisting of his father, mother, and two sons older than Inukpak) used to live inland for prolonged periods, usually over a year. Payne Lake and the area south along the treeline were the regions where caribou were particularly plentiful. This small group lived exclusively by caribou hunting with guns and fishing in the lakes and streams (probably with nets). In winter they did not build igloos, preferring to live in oval-shaped caribou skin tents. No soapstone lamps were used. A fire with wood was kept inside the tent. Akpalitaluk, a maternal uncle of Inukpak, stayed with four other men, all the time hunting caribou inland in a sparsely wooded area, probably south of the treeline. Akpalitaluk's kayak was covered with caribou skins. These inland Eskimos used to trade with the Indians inland, crooked knives being bartered against Eskimo sealskin boots. Various exchanges also took place between the Belcher islanders and the inland Eskimo when the two groups met at the Great Whale River post. The islanders bartered sledges with ivory runners for caribou skins, soapstone lamps, and iron knives. The usual rate of exchange was ten or eleven caribou skins for a sledge.

Low (1906, p. 140) and Elton (p. 366) also briefly mention the existence of inland Eskimos. There is no clear evidence that this inland adaptation was a traditional pattern or a post contact development. Although the use of caribou skin tents and caribou skin kayaks point to the first, doubtless the introduction of the gun gave the Eskimos better control over game, increased mobility, and facilitated their survival in winter inland. This lasted as long as caribou were plentiful.

Transition and Culmination

The second decade of the present century was marked by the establishment of a chain of trading posts along the east coast of Hudson Bay. The Hudson's Bay Company opened Port Harrison in 1920, Povungnituk and Cape Smith in 1927. This profoundly influenced the ways of the local Eskimos. With the new impetus given to trapping, the migration cycles were transformed and new forms of ecological adaptation developed. As a result, the dependence of the Eskimos on the trading posts greatly increased.

The introduction of the repeating rifle accelerated the process which had already begun at the end of the last century. Hunting caribou became easier than ever before, in all seasons. The hunters could shoot with precision from a considerable distance and easily stage a massacre. Because of the nearness of the trading posts there was no longer any shortage of ammunition. As a result, the diminution of the herds continued, and soon there were none to be found near the coast. The caribou hunters had to travel farther and farther inland in search of the scattered small herds.

Rifles and a steady supply of ammunition were instrumental in the rapid replacement of breathing-hole sealing with ice-edge hunting. A new craft, the kayarluk or poor kayak, was used in conjunction with this technique (Balikci, 1960*c*). In the '40's, breathing-hole sealing was entirely abandoned.

During the second and third decades of this century the first whaleboats and Peterhead wooden boats were purchased by the Eskimos. Usually a small group of relatives invested, collectively, a portion of their cash income earned through trapping: "The most successful trapper, usually the elder of the group, owned a larger share of the boat and controlled its use. No trips of importance took place without his acting as captain. Various collaborative patterns appeared between members of the boat crew. Gradually the boat captain emerged as a group leader in various spheres of activity" (Balikci, 1960*a*, p. 8). The introduction of whaleboats and Peterhead boats increased the summer mobility of the Eskimos and enabled them regularly to visit the trading post after breakup. The range of their summer hunts extended, and outfitting walrus hunting parties to the distant Sleeper Islands, North Belcher Islands, and Nottingham Island became possible. The whaleboat transported families and goods from the spring sealing camp to the mainland. Large powered boats were extensively used for whaling and sealing, and also for transporting the hunters to the waterfowl hunting areas.

Kayaks continued to be used for sealing with rifles in the sheltered bays and, more important, for checking the fishing nets in river mouths and lakes. More recently, with the increased cash income of the Eskimos, resulting from family allowances and from soapstone carvings, numerous Peterboro canvas canoes with outboard engines were purchased. These replaced the whaleboats as a short distance transportation device, and the kayak for sealing with rifles.

With the establishment of the new trading posts near the traditional hunting grounds of the Eskimo groups, the lengthy winter group migrations to the Great Whale River factory came to an end. The new posts were visited periodically in all seasons by the hunters only. The traders discouraged the Eskimos from lingering around the post and urged them, once trading was completed, to return to their trap-lines. The continuous association with, and increased dependence on, these trading posts of the East Hudson Bay Eskimos produced the emergence of a new group identity among the people. Gradually the Eskimos trading into Port Harrison became known as Port Harrison Eskimos, and those connected with the Povungnituk post became known as Povungnituk Eskimos.

For a few weeks during the summer, at the period when the supply ship unloads the merchandise for the store, the Eskimos gather at the trading post to wait for employment occasioned by its arrival. A similar gathering, but for a shorter period, takes place at Christmas.

The preferred camp-sites of the Povungnituk Eskimos were along Povungnituk Bay itself where the Povungnituk River and other lesser streams emptied their waters, and at the mouths of the Kugaluk and Tukdjukatak rivers. These areas were the points of convergence of the numerous trap-lines which covered the inland country in a fan-like distribution. From there the sealers started toward the ice-edge hunting areas. In these sheltered bays and neighbouring lakes, fish-nets were placed. The people as a group did not leave their hunting areas, except for the Christmas or ship-time gathering around the trading post. This group stability, however, occurred only after 1932, the date of the last group migration inland to the caribou hunting grounds. That year Aragutaina with a number of kinsmen, wives, and children started in midsummer from Povungnituk Bay and followed Povungnituk River upstream to Philpot Lake. From there they continued in a southwestern direction to Lac Couture and through the Island Rapids north to Lac Duquet. The area west of that lake was considered at the time relatively rich in caribou. The group spent about a month there, fishing and hunting caribou. On the journey the men paddled their heavily-loaded kayaks while the women and children followed on foot. Another group followed a more southerly route leading through Lac Couture to the same caribou hunting grounds.

In the following years caribou became so scarce that the existence of family groups inland was endangered. Group migrations inland ceased completely. The urge to hunt caribou in summer and thus obtain valuable fur for warm winter clothing, so necessary to the trapper, remained strong, and for some time small groups of three or four hunters continued to venture inland in summer, fishing and walking over long distances in search of game. With the continued diminution of the caribou herds, this pattern of caribou hunting was also abandoned in the early '40's. In winter, caribou hunting was continued. As will be shown below, it became increasingly a complementary activity to trapping.

The second quarter of this century was a period of decreasing game returns and intense food anxieties. The caribou, traditionally a source of meat, fat, and fur for clothing, practically disappeared. The people had to rely increasingly on sealing with rifles and fishing with nets. Clothing had to be purchased at the store. Before 1948, the year when the family allowances system was established, the results of trapping provided the Eskimos with the major part of their cash income. Trapping foxes, however, was a highly unreliable economic activity. The prices of the fur fluctuated greatly from season to season, and the availability of foxes depended on their four-year cycle (Elton, p. 421). The Eskimos had very little money to spend on imported foodstuffs. Periods of hunger were frequent. The situation worsened in the '40's. One man and several children died of starvation around 1945. Labrador tea and the leaves of local plants were consumed. Tuluak said: "before we began carving, when I was staying at the mouth of Tukdjukatak river we had very little tea and tobacco. Without tea we were sleepy all day long. When one summer I went to the post to trade, I had just one muskrat skin worth fifty cents. With this money I bought a little bit of tea and tobacco and came back." As late as 1955, according to the local trader, the people were intensely preoccupied with the danger of starvation, they were "thin and constantly begging for food. One day during a hunt I overheard three hunters discussing how many will starve in their camp when they will go back empty-handed" (Peter Murdock, pers. comm). Food anxieties were the instrumental factor in the appearance of certain messianic beliefs (Balikci, 1960*a*, p. 10). Considering that trapping foxes was the main way for earning the all-important cash, this activity was developed to a high degree by the Puvirniturmiut. The following descriptions are a brief reconstruction of trapping in the area during the early '50's prior to the concentration of most Povungnituk and Cape Smith Eskimos around the Povungnituk post.

From the beginning of December until the end of April the Eskimos trading at the Povungnituk post and residing in five camps along the coast used to travel regularly along their established trap-lines, checking the numerous traps and collecting the foxes. The path followed by the trapper usually took advantage of certain topographical features, river-beds or lakes. In some other cases the trap-line seemed to lead more or less directly to the inland lakes where otter and mink are said to be more abundant. The usual configuration of the trap-lines is fan-like; each season varies according to the length of the trap-line, the availablity of foxes, snow conditions, availability of dog food, and various idiosyncratic factors. It takes about seven or eight days to cover a 60-mile-long trap-line, and this is in fine spring weather when the days are longer and there is no fall of fresh snow to slow down the movement of the sleds. It takes a little less than double that time in midwinter when the days are short or the snow is soft. Four to seven trips a season would be undertaken along a trail of this length. Kuananak's trap-line is over 150 miles long and leads to Payne Lake. He usually makes two trips in winter, spending about twenty days inland in good weather and with good snow conditions, and over thirty days in unfavourable circumstances. The total number of days spent by the trappers on the trail averages sixty a season. Certain Eskimos who enjoy the reputation of being very good travellers and trappers stay over eighty days inland. When very few foxes are available, or when there is a general lack of dog food, or when epidemics among dogs have been prevalent, fewer trips are made. Under adverse conditions only the traps near the head of the trap-line are set. It is safe to assume, however, that in optimum seasons the trapper spends about half of the trapping season on the trail, the rest of the time being given to resting, trading, and ice-edge sealing.

Nights are spent in rapidly erecting small snowhouses. The trapper carries with him all the necessary supplies for the journey, including dog food. He rarely neglects, however, to shoot occasional ptarmigan or rabbit whenever these are encountered. In some lakes where fish abound, holes are cut through the ice and some fishing is done with a hook. These activities remain very secondary. The case of winter caribou hunting in recent years is different. A small number of trappers, once at the end of their line, will continue travelling in a southwesterly direction, roaming the tundra south of Payne Lake in search of caribou. No efforts will be spared to make a kill. Caribou hunting in these circumstances is a complementary activity to trapping. Only the trappers whose trap-lines point towards Payne and Tassialuk lakes engage in caribou hunting.

On Map 4 are indicated most of the trap-lines 'owned' by the Povungnituk and Cape Smith Eskimos during the early '50's. Numbers refer to elder trapper or principal trap owner: 1) Tumasi Tuluak; 2) Kuananak; 3) Abraham; 4) Isarak Pov; 5) Peter Matiusi; 6) Isaapik Pov; 7) Charlie Sivugarapik; 8) Lukassiapik; 9) Putugut and Johnny Pov; 10) Simun; 11) Matiusi; 12) Joe; 13) Peter Angutik; 14) Tudlauak; 15) Lukasi and Angajuk; 16) Lew; 17) Levi Kumaluk; 18) Tumasi Pov; 19) Simiun; 20) Iliassiapik; 21) Samuilli Qinujrak; 22) Kupirqualuk.

There is not the slightest evidence to indicate that the traders helped the Eskimos establish these trap-lines. Their development seems a natural outgrowth of the very intensity of trapping and of the large number of traps used. The Eskimos place their steel traps along a line, the shortest possible distance between the traps, which takes advantage of certain topographical features. It is exceptional for a young man to establish his own trap-line. Boys begin by accompanying older trappers—a father, an elder brother, an uncle, or a more distantly related man. They personally own their traps and place them alongside the traps owned by the principal trapper. With time the young man may extend the trap-line, using only his own traps, or he may occupy a whole section of the old line. When the father becomes too old to travel safely along the trail, his son sets his traps for him. The foxes caught in the father's traps, however, belong to the father. At the death of the father, the young man inherits the whole trap-line. If such is the general pattern, there are numerous exceptions. A young man who moves to his wife's camp after marriage may follow his wife's father or elder brother. Another young married man had his trap-line indicated by the father of a child he adopted.

The essential traits of this form of trapping are as follows: First, the younger generation seem to inherit their trap-lines in stages from older relatives, including affinals. Second, trappers usually do not travel alone; they prefer to work in pairs. Although the elder principal trapper and younger assistant trapper seem the most frequent arrangement, numerous other alignments exist: two brothers, two more distantly related individuals, or two particularly close friends may for prolonged periods share a trap-line in a relationship of equality. Each man remains the owner of his traps and remembers exactly their location. Third, following the continuous exploitation of a trap-line a strong feeling of 'ownership' develops. This feeling of 'ownership' applies not so much to the furbearers as to the trap-lines themselves. This is borne out by the following facts: when non-relatives on the trail approach one's trap-line, they avoid coming near, so that their tracks will not be seen and they will not be accused of stealing pelts. Further, when in 1954 the Cape Smith Eskimos moved to Povungnituk, they almost entirely stopped trapping, refusing to establish new trap-lines starting from Povungnituk Bay. They considered this new area as 'belonging' to the Povungnituk trappers. A similar attitude was adopted by the re-settlers from Tukdjukatak River. From their new camp at Povungnituk they travelled south and continued exploiting, in a less intensive fashion however, their own trap-lines along the Tukdjukatak.

This form of trapping, characterized by individual or joint ownership of trap-lines of considerable length, along which the trappers spend at least half of the trapping season checking often hundreds of steel traps, I shall call systematic trapping. This activity is very different from that which was observed among the Pelly Bay Eskimos. There, no trap-lines existed, traps being few and often moved in the middle of the season. Whereas trapping at

Pelly Bay was an activity complementary to sealing, the contrary is true for Povungnituk, where caribou hunting is a simple extension of trapping and where sealing is conducted at intervals, between trapping trips.

The money earned through trapping was considered as strictly individual property. The trapper in this way purchased clothing for himself and his dependants, as well as tea, tobacco, some other imported foodstuffs, and, most important, ammunition. The foodstuffs were generally used within the household, the commensal unit. Whenever the household consisted of two nuclear families (two married brothers), most purchased essentials were used in common. Elderly dependants also benefited from the principal trapper's earnings. Since, however, the preferred residential form was neolocal and the commensal unit consisted in the majority of cases of a nuclear family, the goods purchased with the income from trapping tended to be used within the small commensal unit. Thus trapping, an individualistic activity, was an essential factor in making the nuclear family an important economic unit. In all its relations with the trading store and the trapping activity, the family behaved as a unit. There was only one major communal use of money earned through trapping, and that was the acquisition and operation of whaleboats. These, however, were connected with sea-mammal hunting, where a different right persisted. In the following paragraphs this right will be described.

As was noted above with the case of trapping, the hunters avoided sealing alone on the ice-edge for safety reasons. They preferred travelling to the limit of the firm ice in pairs and sometimes in larger groups. There, the hunt was conducted by the individual sealers, each controlling a portion of the open-sea in front of the ice-edge. However, despite the individual character of this technique, seal meat was shared throughout the camp immediately after the return of the party. Every household in the camp, consisting usually of related families, was certain of getting a portion of the catch. No complex and rigid sharing rules existed, as was the case with the Netsilingmiut. Upon the return of the sealers the people assembled in the household where the game was brought in, and in the presence of the lucky hunter and the elder man in the camp, each household received a share. In the field of local food distribution, the whole camp in winter formed an economic unit.

The returns of spring sealing were divided to a lesser extent. Seals were easily available at that season, and any active hunter armed with a rifle and a screen could secure a relatively large number of sea-mammals. The very abundance of seal meat rendered sharing somewhat less necessary. Some of the meat was dried for later consumption, and the blubber was cached in sealskin containers. Later in the summer or in winter whenever a shortage of seal oil occurred in the camp, the caches were opened and gifts were made to the needy.

In summer, seals and white whales shot in open water from kayaks or whaleboats were equally divided. The white whale blubber was stored for communal use in winter as dog food.

Late spring and autumn fishing with nets, during the downrun and uprun of the arctic char, gave rise to restricted sharing. Everybody had nets, and it was easy to secure a large catch of fish. These were the periods for intense visiting, and frequently small groups of people shared a meal of raw fish fresh from the net.

Food-sharing patterns at the camp level among the eastern Hudson Bay Eskimos have been observed by Honigmann at Great Whale River in 1949–50 when the economy of these southerly Eskimos was essentially similar to the hunting-trapping pattern at Povungnituk (Honigmann, 1951, p. 7). Desgoffe also briefly mentions the existence of food sharing among the Belcher Islanders (Desgoffe, 1955, p. 48, 55). Willmott has given a more detailed description of local food sharing in a northern Port Harrison camp bordering on the hunting-trapping area of the Eskimos trading into Povungnituk:

> The products of the seal hunt are individually owned by the killer of the seal, but the meat is shared throughout the camp... Similarly, the products of a fowl hunt are shared throughout the camp. On one hunting trip, all the birds were divided as soon as we returned to the camp, so that each household received an equal share of each variety of bird... Fish, on the other hand, are not divided, but go directly to the household whose nets caught them. However, whoever is in the tent when the fisherman returns can share in the meal, and if any household does not have fish in its nets, it will be provided with fish from other nets (Willmott, p. 29).

All the evidence points to the fact that until the present time among the hunting-trapping Eskimo communities of eastern Hudson Bay, game was shared throughout the camp. It is possible thus to conclude that in the field of food distribution the camp as a whole may be considered as an important economic unit. This characteristic of the camp was strengthened by the common ownership and operation of larger boats under the direction of a leader. As was stated previously, seal and white whale hunting from a whaleboat was a group activity, involving cooperation between the members of the crew. Willmott clearly states: "Essential to our understanding of the Harrison Eskimo economy is that the seal hunt is a cooperative enterprise. Because it involves a canoe or a larger boat, and because most of them are not privately owned, it demands the agreement of several people even before it begins" (Willmott, p. 27, 28). The captain of the boat, usually the best of the elder hunters-trappers in the camp, acquires a special position of leadership and authority in the camp. He decides when the trading journey will take place and how long it will last, and he organizes the seal-hunts. The boat cannot be used without his permission. Further, at the death or absence of the elderly leader it is generally the eldest and ablest son who 'inherits' the control of the boat and assumes a position of leadership in the camp. At Povungnituk, Kupirqualuk in this way gained control of his father's boat. When old Amamatuak went to hospital for a prolonged period, his son Adami took over the control of their Peterhead boat. The acquisition of whaleboats by the Povungnituk Eskimos combined with the emergence of camp leaders may be considered a result of the fur trade. Systematic trapping allowed for sufficient funds to be spared to acquire whaleboats. Certainly the competition that arose between the two fur-trading companies, the Hudson's Bay Company and the Révillon, was instrumental in the introduction of whaleboats in the area. Such an expensive item placed a whole camp in debt and tied it up to a particular trader. Thus in an indirect way individual trapping provided the basis for communal activities under a leader and helped the persistence of communal food sharing. Somewhat more clearly in summer than in winter the Povungnituk camps during the early '50's may be considered as important economic units in their own right. (For a discussion on the changes of native leadership following the introduction of the fur trade among the northern Ojibwa and three Eskimo communities, *see* Dunning, 1959*a*, and Balikci, 1960*b*.)

Widespread local food sharing was facilitated by the very composition of the camp. In most cases the camp consisted of a small number of consanguineally related kinsmen with their wives and children, together with some affinally related men. The group inhabiting the mouth of Tukdjukatak River is illustrative of this arrangement (adults only). Three elderly brothers formed the core of this camp: Sidlualuk, blind; Tuluak, a mediocre hunter; and Qinujrak, the ageing leader; Samuilli and Nua were the two married sons of the headman; Tumasi and Isak, the two married sons of Tuluak. With Qinujrak's second wife, Alisi, there were settled her two sons with their families and her daughter Mina, married to Timothy. This camp comprised about forty individuals, of whom ten were adult males.

Kupirqualuk's camp established in the southern part of Povungnituk Bay presented a somewhat different picture. The following people resided there: Kalingu, his brother Peter Angutik, and their sister Lydia, married to Kupirqualuk; the latter's brother Paulusi Sivuak with his family; Kalingu's adopted daughter's husband, Peter Nupqa; Kalingu's wife's brother Davidiapik; and Peter Angutik's adopted son's father, Peter Tukaluk. This camp was of about the same size as the previous one.

It is difficult to generalize about resident patterns characteristic of this period. Since cousin marriage is not practised among the Puvirniturmiut, as was the case with the Pelly Bay people, and since there were numerous kinship bonds among the camp fellows, mates were looked for in the other settlements. This is borne out in the genealogies. The choice of a mate was made either by the young man asking the father to approach the parents of the girl or by the father himself. In the majority of cases the girl moved to her husband's camp. Some young men, however, chose matrilocal residence. Later in life the family might decide to change camp.

Numerous factors seem to influence residence choice. A young man seems unwilling to leave his father's settlement because of his knowledge of the trapping country inland and general hunting conditions on his traditional grounds. In a distant area he will feel lost unless he is immediately helped by his wife's relatives. The cohesiveness of the local group may be another factor. A young man from a closely knit group of kinsmen will probably remain in his camp, whereas the son of a marginal family in the camp may find a separation less difficult. Thirdly, the personality and social position of the father may be a crucial factor. The son of a leader will most probably remain in the camp with the aim of inheriting the whaleboat. Fourthly, the desire to live near the trading post may prove stronger than all other considerations. It seems, however, that patrilocal residence was generally predominant. Willmott noticed the same occurrence among the

Port Harrison Eskimos: "Marriages are usually patrilocal. When the partners are from different camps, as is usually the case, the wife joins her husband's camp" (Willmott, p. 58). This undoubtedly influenced the kinship composition of the camps, allowing for a small group of consanguineally related males to form its core.

The contemporary religious organization of the east Hudson Bay Eskimos also strengthened the cohesiveness of the camp. Following the conversion of the east Hudson Bay Eskimos to Anglicanism in the 1880's, a number of Eskimo catechists were instructed by the missionaries. These lay preachers presided over the Sunday services involving the whole camp, directing the prayers and readings, and preaching sermons. Despite the fact that for formal Christian marriage the people were dependent on the missionary, to a considerable extent the camp may be considered as a self-sufficient religious unit under the guidance of the catechist. In most camps the local leader and boat captain was instructed as a catechist, which undoubtedly increased his prestige in the group.

Most Puvirniturmiut camps at the beginning of the '50's may thus be considered as economic and religious units in their own right, the camp fellows bound by various kinship ties under the leadership of a headman, usually the camp elder, in control of the whaleboat.

Not all camps, however, exhibited these organizational forms. Some were agglomerations of unrelated or very distantly related families. Such was the case of the group living near the trading post, attracted there by various advantages such as the possibility of obtaining casual employment or relief and benefiting from medical help. With the introduction of the Family Allowances system and the appearance of new sources of income, such as soapstone carving, the isolated camp settlement pattern based on a hunting-trapping economy tended to break down. The decrease of ecological pressure produced powerful centralizing forces resulting in the concentration of almost all the Povungnituk and Cape Smith Eskimos in a single area, Povungnituk Bay.

The essential aspects of the recent organizational developments that took place among the Povungnituk Eskimos were described in a previous paper (Balikci, 1959, p. 8, 11). The local trader, acting as community organizer, encouraged the making of soapstone carvings on a massive scale. The following amounts indicate the progress of this activity.

Carvings purchased by the Hudson's Bay Company store at Povungnituk (1952–58)

	$
1952–53	740
1953–54	1,347*
1954–55	20,185
1955–56	38,000
1956–57	42,617
1957–58	49,000

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* Including some sealskin artifacts.

The last figure does not include the carvings sold to the newly created Povungnituk Sculptor's Society, operated by the missionary.

The Eskimos were increasingly tempted to substitute carving as a regular source of cash income to the highly fluctuating returns of trapping:

Furs purchased at the Hudson's Bay Company store at Povungnituk (1952–58)

	$
1952–53	18,232
1953–54	39,361
1954–55	7,683
1955–56	7,344
1956–57	4,676
1957–58	5,388

According to the fox cycle, this last year was supposed to constitute a peak in fox availability. Instead, it was below the average of the three preceding 'lean' years. The Puvirniturmiut tended to form a 'carving community.' In association with this, the total sales at the store nearly quadrupled in this period. These totals include the purchases made with family allowances, old age and disability pensions, various forms of government relief to needy persons, and so on.

Total sales made by the Hudson's Bay Company post at Povungnituk (1952–58)

	$
1952–53	24,611
1953–54	61,457
1954–55	47,419
1955–56	56,874
1956–57	77,888
1957–58	95,629

The necessity of relying on game as the principal source of food disappeared among the Puvirniturmiut since they consumed increasingly larger amounts of flour and other imported foodstuffs. However, their desire for fresh meat remained strong. In order to assure the supply of fresh meat in summer, more boats were necessary to carry the hunters to their traditional hunting grounds.

> Individual hunters could not easily face these new expenses. A collective solution to the problem had to be found. The local trader suggested and succeeded in establishing the following programme. The seven or eight Eskimo groups (including the Cape Smith Eskimos) who lived in relative isolation along the coast prior to their concentration at Povungnituk, were to establish group accounts at the trading post. A fraction of all earnings was to go to the group accounts. With the funds thus accumulated some larger goods for collective use such as boats and new engines could be obtained. Only elected group leaders had authority to spend the funds. No community, supra-group account was envisaged. The system worked successfully (Balikci, 1959, p. 9).

It is easy to see that this camp account system with elected leaders is a formalized version of the organizational traits which existed during the previous acculturative period. When the old camp groups settled at Povungnituk in the period between 1955 and 1957, they formed distinguishable clusters of tents around the bottom of Povungnituk Bay. Despite some shifting of families, fission of a camp group, and fusion of another two, the camp groups tended to behave as distinct units. Their older headmen were elected leaders, but in two cases the ageing fathers were succeeded by their elder sons. In the summer of 1958 these groups constituted the social units within which local meat was shared. When a canoe or a whaleboat carrying hunters from two camp groups returned with a large number of waterfowl, the birds were divided on the shore into two piles, one for each group. Immediately after, each household in the two camps received its share, according to the size of the commensal unit.

The essential thing to remember is that even under changing socio-economic conditions and settlement patterns leading to the concentration of these Eskimos in a single area and the emergence of formal group structures and leadership, widespread food-sharing patterns continue to persist, and this despite the introduction of an essentially individualistic activity such as carving. In 1958, more clearly than before, the camp group continued to function as an economic unit.

CHAPTER FIVE

Conclusion

In a recent paper Julian Steward and Robert Murphy have summarized the recent socio-economic history of two widely separated peoples: the Mundurucu of the Amazon basin and the northeastern Algonkians in Canada (Murphy and Steward, 1956). Steward, interpreting the evidence assembled by Leacock, distinguishes four acculturative periods for the Montagnais: 1) The *pre-fur* phase is characterized by nomadic composite bands hunting large migratory game animals; frequent band breakup during winter scarcity; amalgamation of several winter groups for summer hunting and fishing; weak and unstable chieftainship; no summer band chief; bilocal residence; frequent shifts of winter group membership. 2) The main traits of the *marginal involvement* period are: trade by family heads; leaders not trading for followers; trapping secondary to subsistence hunting; subsistence still gotten traditionally, basic social patterns persisting; no trapping territory; linkage to trading posts. 3) *Transitional phase:* further displacement of native crafts, increased need of trade goods, increased dependence on trader; increased fur production interfering with subsistence hunting; individual trade conflicting with group solidarity. 4) *Convergence and culmination:* fur trapping now predominant; winter provisions purchased; winter groups not necessary with end of collective hunt; family or individual hunting giving greater efficiency, allowing conservation; shift of economic interdependencies from group to trader; emergence of a chief who serves as intermediary with Indian agents and missionaries; nuclear family basic unit at all times of year; right to a delimited hunting territory, maintained and transmitted by trapper and exploited only by his family (Murphy and Steward, 1956, p. 348).

In this recent development sequence, the fur trade, or more precisely, the growing importance of trapping furbearers, is the causative factor for a number of organizational changes in Montagnais society. Traditionally, the nomadic composite band under a weak leadership was the functioning unit of the Montagnais, and this was in harmony with some rigid ecological factors. Following the introduction of intensive trapping, displacing gradually subsistence hunting, the nuclear family in exercising rights over a delimited hunting (trapping) territory has emerged at the end of the acculturative process as the only basic unit at all times of year. The authors recognize however that "Two basically different concepts of rights to resources within the same area co-exist, each justifiable and explainable in its own way: the right to hunt large game for subsistence purposes practically anywhere and the right to monopolize fur-bearing animals within prescribed areas" (Murphy and Steward, p. 339). The relative importance of this first right in the contemporary social organization of the Montagnais is not assessed. The new 'band' formation is not a cooperative unit, and it has no organizational basis.

"This new 'band,' however, is of a different order entirely from aboriginal hunting bands, for the principal bond between the members is that they all trade at the Seven Islands trading post" (Murphy and Steward, p. 339). The new band chief is considered only as an intermediary with Indian agents and missionaries. Briefly, at the end of the acculturative process Steward leaves no place for suprafamily organizational forms among the Montagnais. Finally, an attempt at generalization is made: "When the people of an unstratified native society barter wild products found in extensive distribution and obtained through individual effort, the structure of the native culture will be destroyed, and the final culmination will be a culture type characterized by individual families having delimited rights to marketable resources and linked to the larger nation through trading centres" (Murphy and Steward, p. 353). Contrasting sea-otter collecting for the fur-trade on the Northwest Coast and hunting for buffalo hides on the Plains, both activities involving coordinated efforts producing indirectly the emergence of superior social forms, with the small, non-gregarious and non-migratory animals trapped in Canada, the authors find it necessary to specify certain characteristics of the furbearers and the trapping technique; namely, that they be wild products found in extensive distribution and obtained through individual effort. Such are exactly the characteristics of the arctic fox and the way in which it is collected by the Eskimos. Let us now see whether the acculturative process outlined in this recent developmental sequence and culminating in the hypothesis quoted is applicable to the Eskimo data presented here.

The three central chapters in this work describe the socio-economic organization of two Eskimo groups at three distinct acculturative periods. Indeed they may be considered as three 'communities' representing three different organizational forms. They are sequentially presented on the basis of the growing importance of fox trapping, the main causal factor responsible for the socio-economic changes under analysis. The traditional Arviligjuarmiut did not rely on trapping for their subsistence. In winter they lived in large camps hunting seals. These camps were described as important economic units superseding the economic functions of the family. The web of sharing partnerships in the sea-ice camp points to a reciprocal form of economic integration: "Reciprocity denotes movements between correlative points of symmetrical groupings" (Polanyi, 1957, p. 250). In summer, the winter groups split into smaller units, fishing and hunting caribou together inland. For precise ecological reasons, in the subarctic these processes of fission and fusion took place at different seasons—larger units in summer, smaller units in winter. In both areas leadership may be considered as weak; the Eskimo summer groups, because of their tighter kinship structure and the organizational necessities of the caribou drives, probably knew a stronger form of leadership. These summer groups were certainly important economic units in their own right.

Among the contemporary Arviligjuarmiut some curious developments were noticed. Despite the established linkage to the trading posts, trapping is still a marginal activity; traps are few, and they are usually placed along the routes to the sealing areas. Sealing and fishing are still very important, because despite a displacement of native crafts these Eskimos employ only a small amount of imported foodstuffs, relying mainly on local hunting for their subsistence. Despite the marginal character of trapping, the social pattern has been greatly changed. For numerous reasons, most of the Pelly Bay Eskimos are concentrated in a main camp around the mission-trading store. This centripetal movement, far from helping the emergence of more complex social forms, saw the nuclear family become the basic economic unit in all seasons and in all economic activities. Marginal trapping, intensive subsistence hunting, and the nuclear family as the basic unit are variables belonging to different accultúrative phases, according to Steward's developmental sequence. These important economic functions of the family should have been found at the end of the process and not during the period of marginal involvement. The fact that the nuclear family behaves as an autonomous unit in its dealings with the trader is a necessary consequence of the individual ownership of the pelts. However, the nuclear family has also become the most important social unit in the fields of local food acquisition, distribution, and consumption. The introduction of the rifle and other acquisitive individual techniques has naturally rendered the old cooperative patterns obsolete. However, it is the disappearance of the traditional sharing patterns that is difficult to explain. Several factors may be enumerated here. The first is an ecological one. In Povungnituk for the culmination period, the very abundance of game returns tended to make sharing unnecessary, restricting its range. The introduction of the rifle in the Pelly Bay area, a very rich sealing region, by vastly increasing the game returns, produced a similar condition. Everyone who wanted to secure a seal could do so individually. The very necessity for sharing disappeared. Secondly, the traditional seal-sharing pattern was associated with breathing-hole hunting alone. When group breathing-hole sealing was abandoned, these Eskimos did not transfer their concomitant sharing pattern to other forms of sealing. Thirdly, the concentration of most Pelly Bay Eskimos in a main camp brought together a larger group of relatives than ever before. Normally, informal food gift-giving between relatives should have been extended. Because of the abundance of game, the contrary took place.

Briefly, the organizational transformation that took place among the Pelly Bay Eskimos was more the consequence of certain technological changes than the result of the acceptance of a major new activity like trapping. Strangely enough, the introduction of the rifle in this area had organizational results similar to those of the all-important trapping among the Montagnais. On the basis of subsistence hunting with rifles, the traditional reciprocal pattern has disappeared and the nuclear family has tended to emerge as the basic economic unit at all seasons.

The socio-economic development of the Povungnituk Eskimos followed a reverse order. Because of the great importance of systematic trapping in that area, the Puvirniturmiut were coming closer to the convergence and culmination phase. The trapper of northeastern Hudson Bay spent the greater part of the trapping season along his trail, checking often hundreds of traps. During the peak fox years he was able to buy imported foodstuffs in quantity. During the periods of diminished fox availability, he had to rely more on local game, mainly seal and fish. Among these Eskimos, as among the Pelly Bay people, the nuclear family behaved as an autonomous unit in its relations with the fur trade. Subsistence hunting however, always important, continued, together with extended sharing patterns at the camp level. The persistence of these sharing patterns in all seasons was probably facilitated by the relatively lower availability of seals in comparison with the Pelly Bay area, the relatively small size of the camps averaging about forty people, the close kinship affiliations of the camp fellows, and the emergence of summer cooperative sealing with whaleboats controlled by a leader. Here the traditional reciprocal pattern has persisted, strengthened by some technological innovations, together with a high development of systematic trapping.

The evidence from the Eskimo area presented here points to the fact that to a certain degree the three functionally-connected elements (subsistence hunting, trapping, and basic units), when examined developmentally in several communities, tend to behave as independent variables. There are evident difficulties in establishing a close parallelism between the Montagnais acculturative sequence and the Eskimo data. The main reasons for these divergencies are simple. It is assumed here that traditionally, despite the widely accepted view of the homogeneity of Eskimo culture, there were considerable ecological and socio-cultural variations in the different Eskimo areas. With the presence of the intrusive agents, the external determinants of socio-cultural change have combined with the different local traits and patterns to produce divergent acculturation trends. One tendency stands out clearly; namely, trapping with individual fur ownership tends to make of the nuclear family an important socio-economic unit. It is hardly possible, however, to generalize any further. It seems as if at any acculturative phase an Eskimo group may traditionally preserve or newly evolve supra-family integrative patterns.

Is it possible to place the many socio-economic changes described here under a single heading? Can one consider these changes as simply organizational, affecting the directional activity of social relations and extensions of social units, or as structural, altering the very principles upon which the social system is built (Firth, 1956, p. 28)? In a recent contribution to the theory of cognatic forms of social organization, Murdock has attempted a redefinition of his bilateral or Eskimo type of cognatic structure (Murdock, 1960, p. 6). Eliminating his reference to kinship terminology, the Eskimo type is defined by six characteristics:

1. Prominence of small domestic units and absence of any form of extended family.
2. Prevailing monogamy with no more than a limited incidence of polygamy.
3. Ambilocal or neolocal residence, i.e., with no invariable unilocal rule.
4. Absence of any functionally important descent groups, unilineal or ambilineal.
5. Presence of bilateral kindreds or at least no specific report of their absence.
6. Absence of distinctions in the marriageability of different kinds of first cousins.

The Netsilik data clearly fail to corroborate two of these traits. First, as was shown previously, the Netsilingmiut had extended or joint families in traditional times. Second, there was a marked tendency towards patrilocality in the Netsilik area. Concerning the prevalence of monogamy, the absence of discrete descent units, the presence of ego-oriented kindreds, and the marriageability of both parallel and cross-cousins, the Netsilik data are in harmony with Murdock's Eskimo type. Despite the fact that kinship and descent problems did not constitute the main subject of this dissertation, it is possible to state that the socio-economic changes observed among the Netsilingmiut have not affected the basic social structure of these Eskimos: they continue to recognize extended families although these have lost functions; patrilocality is still practised; monogamy is more strictly adhered to following missionary influence; now as in earlier times the absence of descent groups is easily observable while kindreds continue to exist. Following numerous recent influences, the traditionally preferred cousin-marriage pattern has been fully developed. Clearly, no new form of descent, no internal structural changes of the kinship units, no alteration in the household authority pattern have appeared (Firth, 1959, p. 340). Eskimo society has traditionally been very simple and has remained so. Even the recent concentration and stabilization of the Netsilik leading to the emergence of a new type of community will probably continue to favour the structural characteristics previously enumerated.

Thus the cultural changes among the Eskimos described in this work are essentially changes in socio-economic organization. A selective effort has been made, however, to avoid unnecessary enumeration of secondary traits. The size, functions, and composition of the basic functioning units have thus been considered as the central variables around which the relevant data could be organized. With this approach, I hope I have avoided to a certain degree the dangers implicit in the statement by Professor Meyer Fortes when he writes about "the amorphous subject matter usually labelled culture change."

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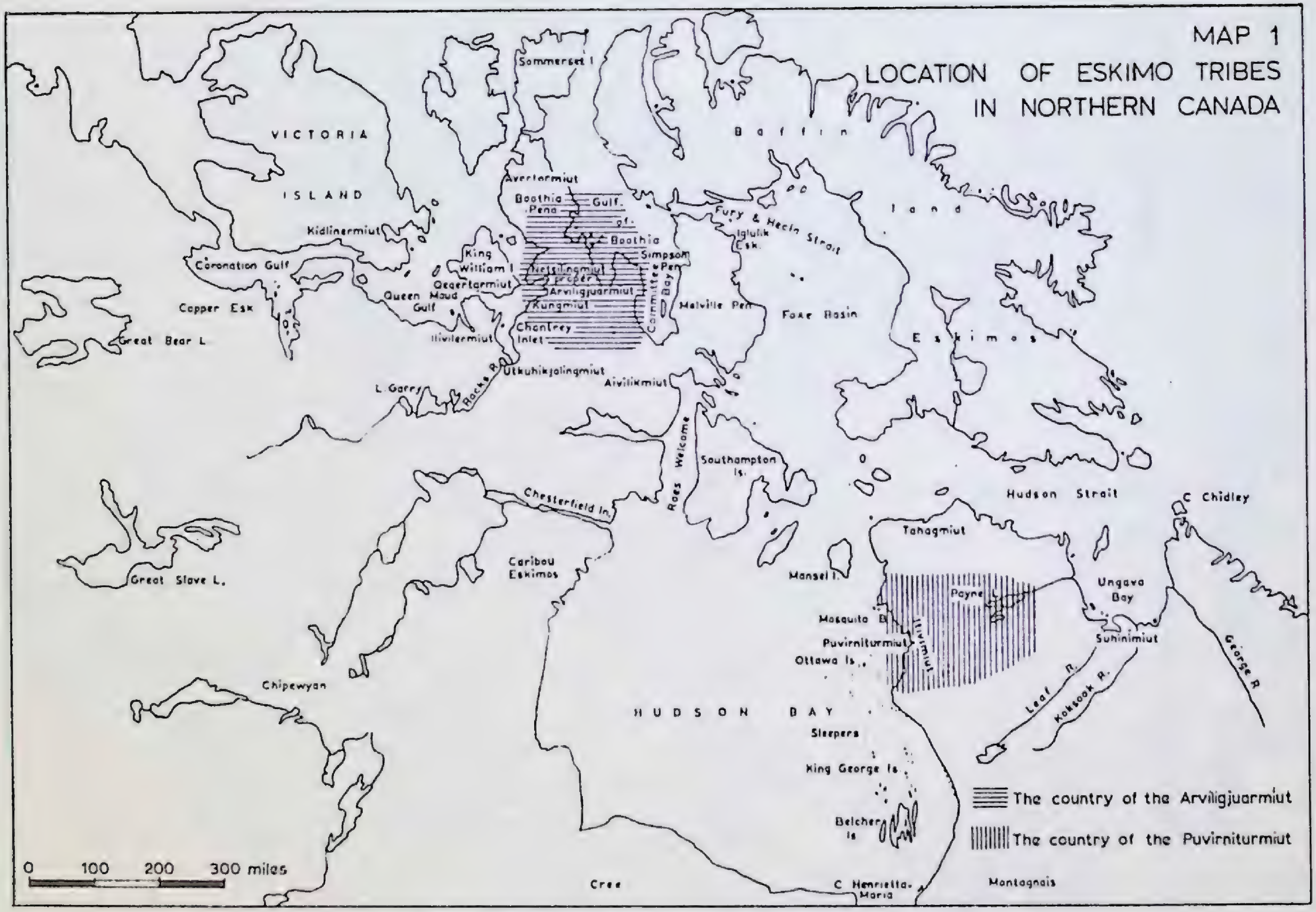
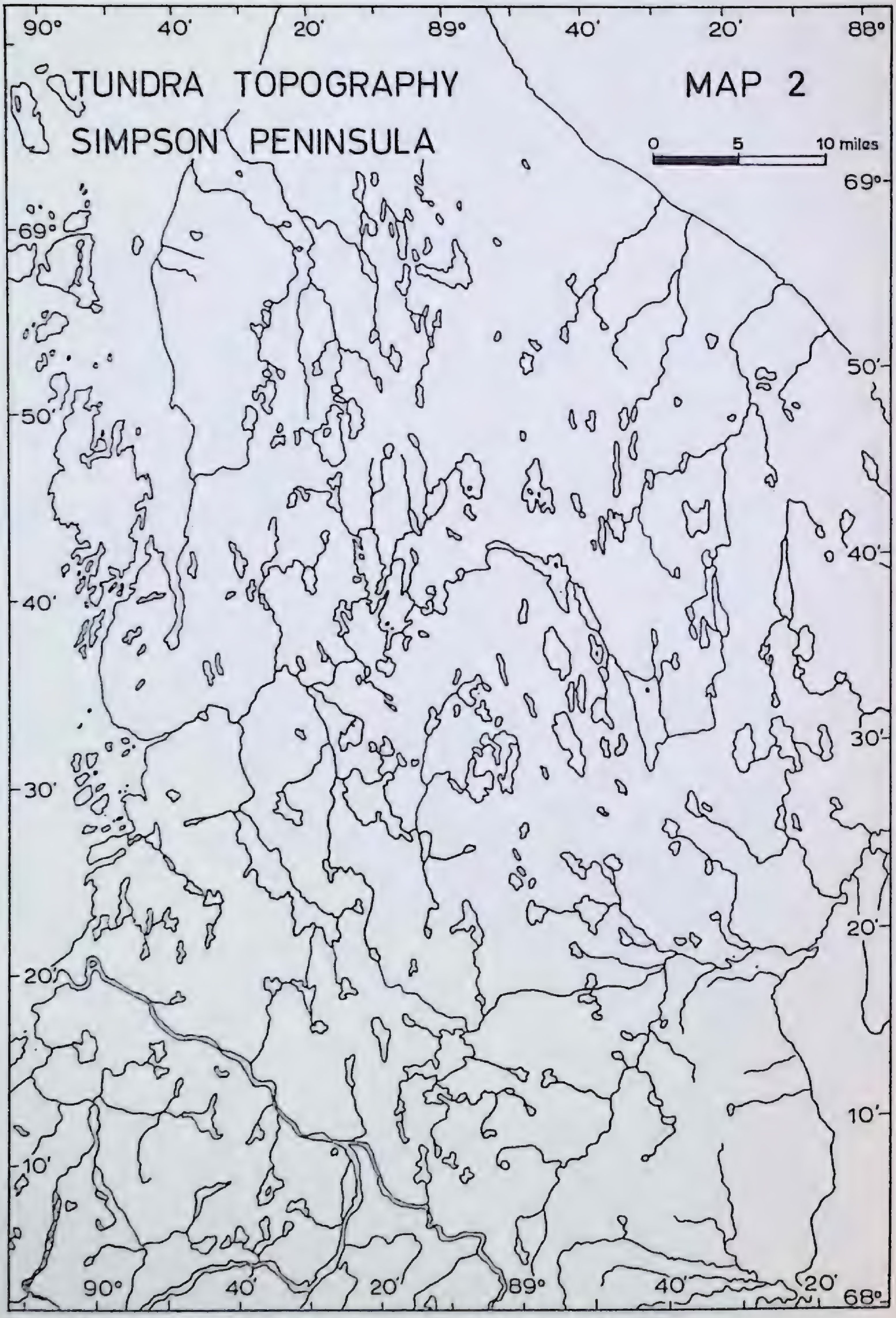


Map Fig. 1. Location of Eskimo tribes in Northern Canada



Canada National Topographic Series fourth edition (preliminary) 1957.

Map Fig. 2. Tundra topography

MAP 3

THE COUNTRY OF THE ARVILIGJUARMIUT

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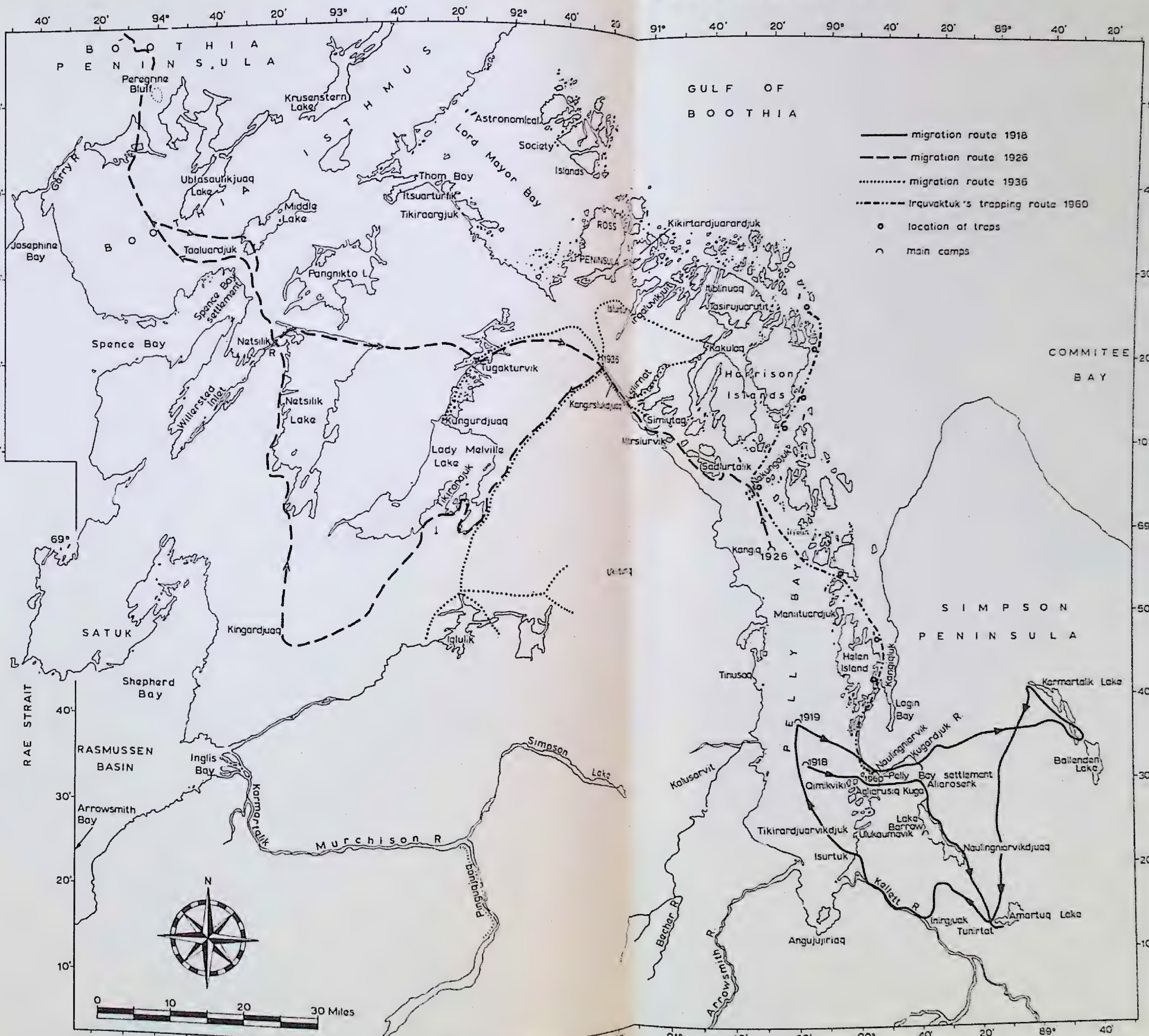

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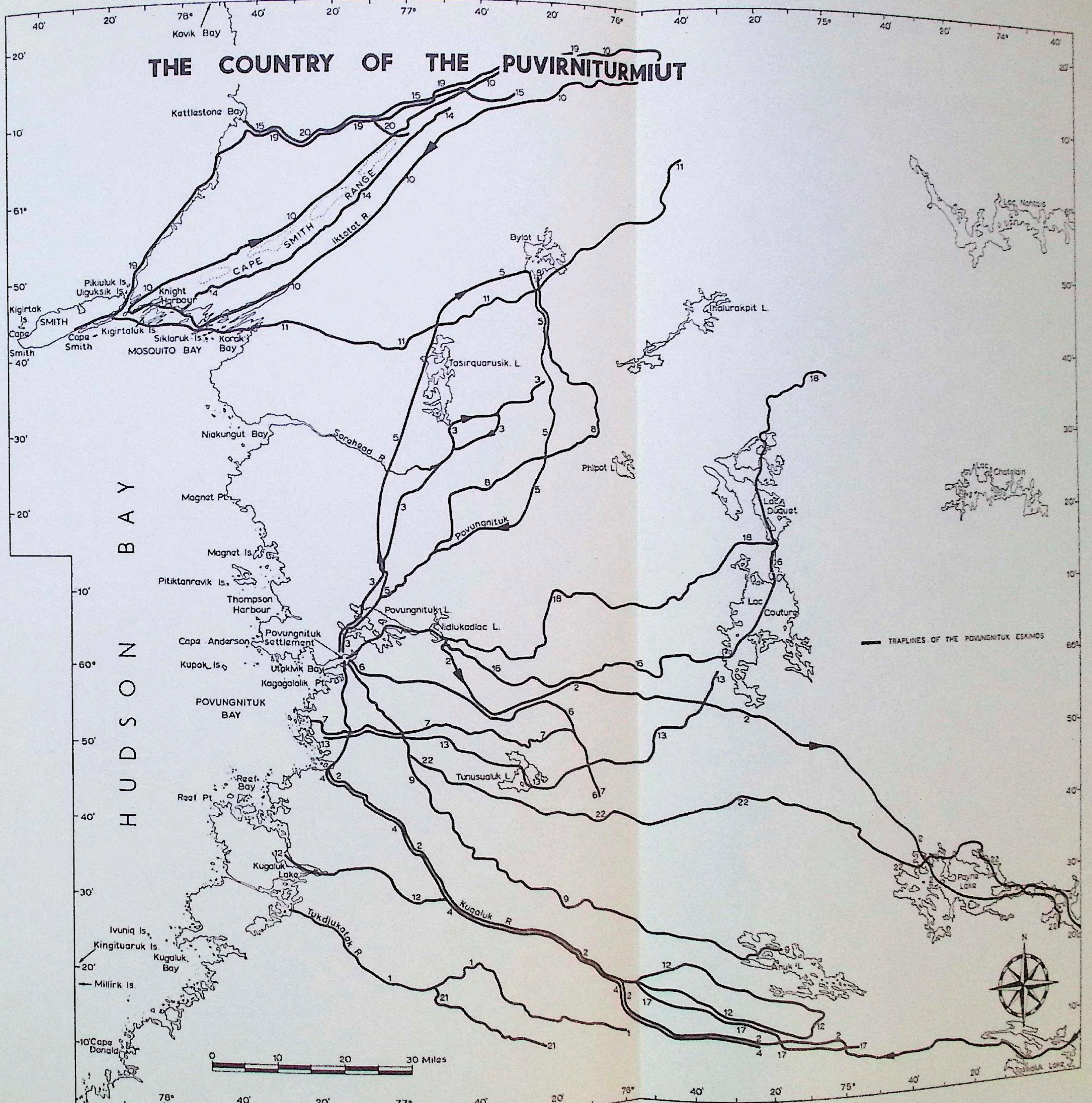

THE COUNTRY OF THE PUVIRNITURMIUT

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